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PACIFIC PULP & PAPER INDUSTRY

Volume 5
Number 9

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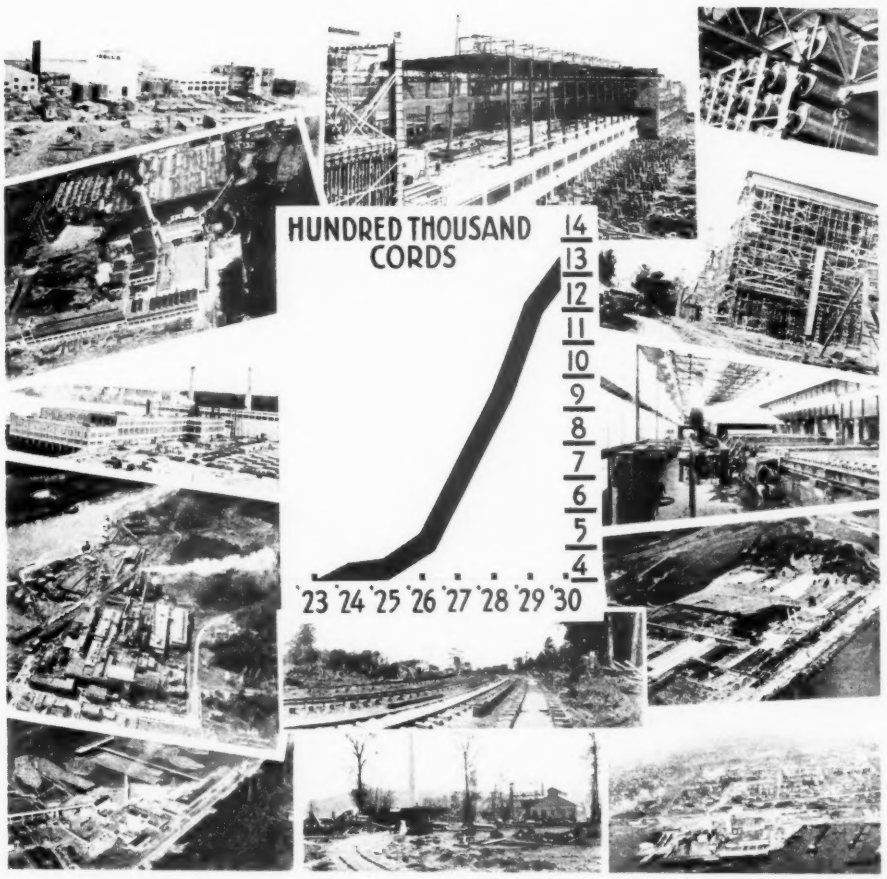


The Mounting Curve of Pulpwood Consumption in the Pacific States.
The construction of new tonnage emphasizes the industry's shift to Westward

AUGUST + 1931

LIQUID CHLORINE

TACOMA ELECTROCHEMICAL CO.
KEYSTONE BRAND
TACOMA, WASH.
SUBSIDIARY PENNSYLVANIA SALT MFG. COMPANY

ACIDS
ALUMS
ALUMINAS
CAUSTIC SODA
LIQUID CHLORINE
BLEACHING POWDER
GREENLAND KRYOLITH
SODIUM HYPOCHLORITE
AMMONIUM PERSULPHATE

THE distributing facilities of the Pennsylvania Salt Manufacturing Company besides being nation wide are highly specialized. Tank car equipment and containers are maintained in perfect condition to assure prompt service and safety to customers.

Liquid Chlorine and Caustic Soda are available the country over on short notice due to the strategic location of Penn Salt plants.

The carefully developed qualities of service which the Pennsylvania Salt Manufacturing Company has fostered have been added to the high quality of Tacoma Electrochemical Company Liquid Chlorine and Caustic Soda.

TACOMA ELECTROCHEMICAL COMPANY

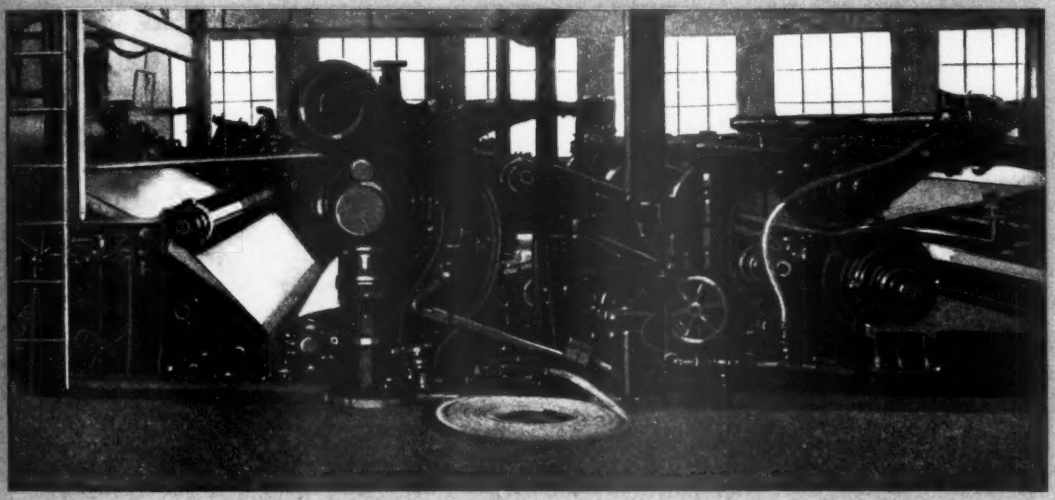
TACOMA, WASHINGTON

WESTERN DIVISION OF PENNSYLVANIA SALT MANUFACTURING CO.

Pacific Pulp & Paper Industry is published once a month—except in March, when publication is semi-monthly—at 71 Columbia St., Seattle, Wash. Subscription: U. S. and Canada, $4.00; other countries, $5.00. Entered as second class matter May 20, 1927, at the Postoffice at Seattle, under the Act of March 3, 1879.

Are you troubled

WITH CRUSHING AND BLOWING AT THE PRESSES ?



BELOIT *Suction Press Rolls will help you*

THE use of Suction Press Rolls installed on pickup felt machines or any machine giving trouble with crushing and blowing at presses, betters the formation of the finished sheet to a marked degree. Smoother operation is assured, and the last pound of production possible is secured on your present machine. These are but a few of the many benefits that Suction Press Roll users the country over are securing.

Many mills find that Beloit Suction Rolls usually pay for themselves within 4 months' time and thereafter are constantly on their payroll, *paying* dividends instead of drawing pay checks.

Modern Methods Shown in New Book

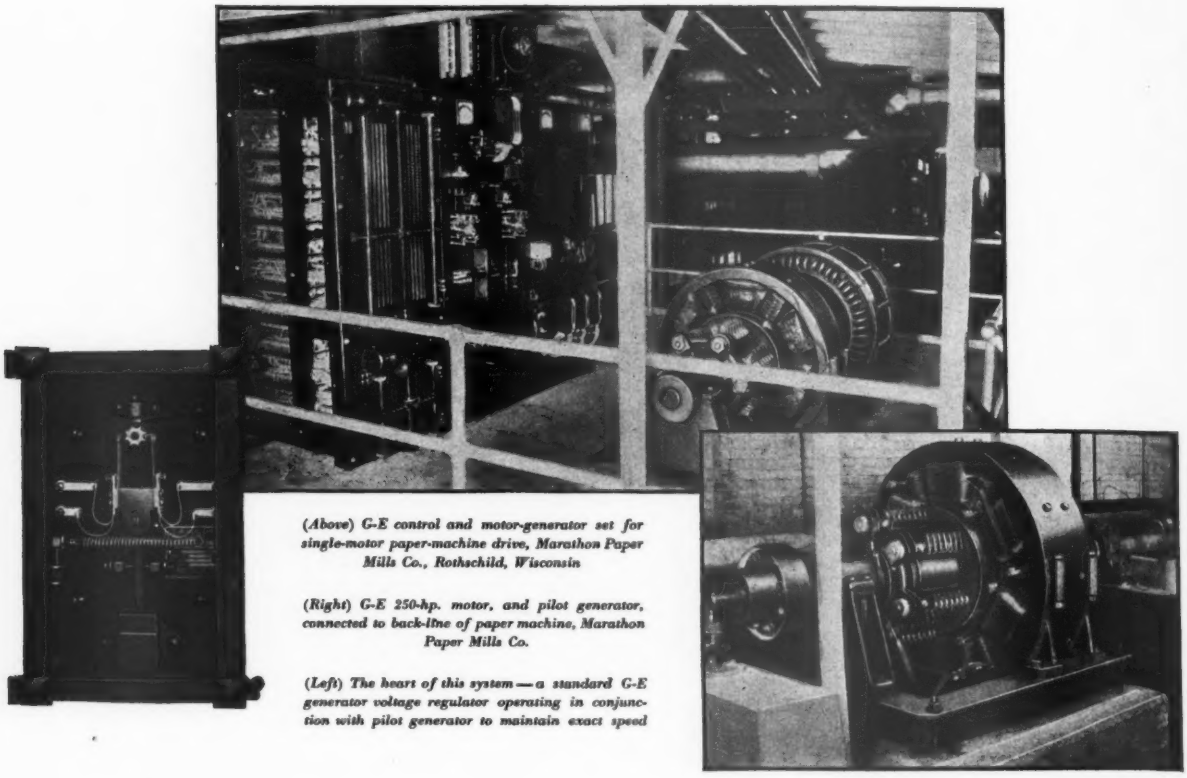
Increased production and lowered costs are the rule wherever these modern rolls are used. It will pay you to get our new Suction Roll Book, which is available to interested executives who desire to utilize modern methods of solving their problems. Send for a copy. It will prove valuable to you.

The *Beloit* Way is the *Modern* Way

BELOIT IRON WORKS, BELOIT, WIS., U. S. A.

The BELOIT

Modernize the adjustable-speed portion of your paper machine with G-E SINGLE-MOTOR DRIVE



(Above) G-E control and motor-generator set for single-motor paper-machine drive, Marathon Paper Mills Co., Rothschild, Wisconsin

(Right) G-E 250-hp. motor, and pilot generator, connected to back-line of paper machine, Marathon Paper Mills Co.

(Left) The heart of this system — a standard G-E generator voltage regulator operating in conjunction with pilot generator to maintain exact speed

THIS new G-E system, illustrated here, considerably extends the field of single-motor paper-machine drive. Consider what it has to offer:

Close and positive speed regulation with a speed range of 10:1.

Easy and convenient adjustment over this wide range with a regulator that is both simple and strong, and whose characteristics may be easily understood by your mill electrician.

A system that eliminates varying speed as a factor in weight control.

Your nearest G-E office has complete information on G-E single-motor drives for paper machines and will be glad to supply details.

230-3

JOIN US IN THE GENERAL ELECTRIC PROGRAM, BROADCAST EVERY SATURDAY EVENING ON A NATION-WIDE N.B.C. NETWORK

GENERAL ELECTRIC

SALES AND ENGINEERING SERVICE IN PRINCIPAL CITIES

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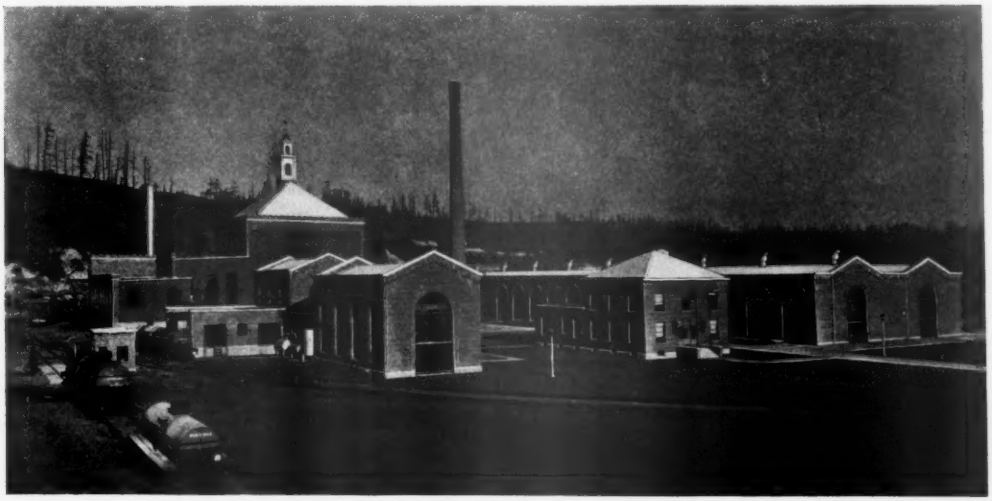
LIQUID CHLORINE



TACOMA PLANT—HOOKER ELECTROCHEMICAL CO.

WITH THE MODERN HOOKER PLANT CONVENIENTLY LOCATED AT TACOMA, WASHINGTON, A PROMPT AND EFFICIENT SERVICE IS AVAILABLE TO USERS OF LIQUID CHLORINE.

FOR OVER 20 YEARS HOOKER LIQUID CHLORINE HAS BEEN SERVING INDUSTRY, BACKED BY EXPERIENCED ENGINEERING AND RESEARCH FACILITIES THAT ARE READILY AVAILABLE.

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HOOKER ELECTROCHEMICAL CO.

HOOKER ELECTROCHEMICAL COMPANY

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HOOKER CHEMICALS

1008

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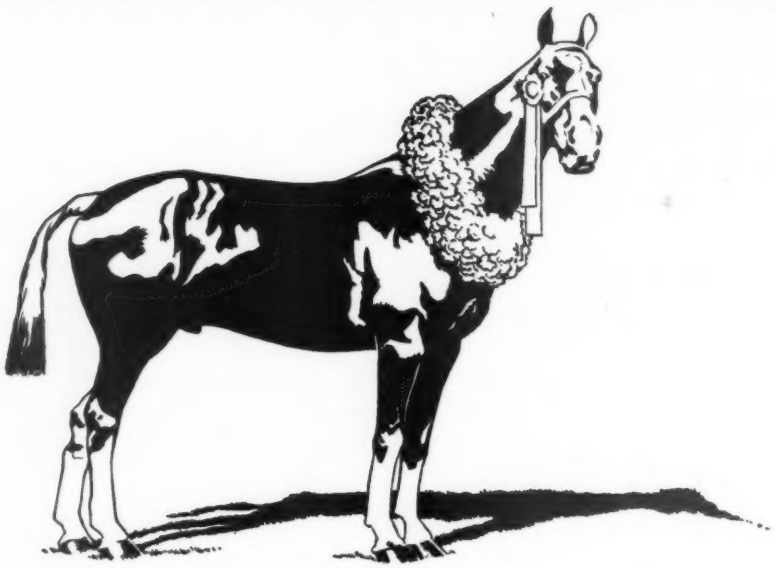
KENWOOD FELTS POSSESS AN ADDED FACTOR BEYOND STRENGTH, SOFTNESS, SURFACE OR SMOOTH RUNNING



Confidence—dependability—the knowledge that the felt placed in service is a thoroughbred of a long line of thoroughbreds is the added incentive for clothing paper machines throughout with Kenwood felts.

Each Kenwood felt of today is the result of progressive, scientific development. Kenwood pioneered the one-sided board felt. The same research service developed and perfected the patented Kenwood tanning processes which protect the felt from the deteriorating effects of acids.

KENWOOD WOOL PRODUCTS

A third major development is that in which a new method of yarn construction, while adding nothing to the size or weight of the yarn, provides definite advantages, both in strength and increased openness.

A balanced clothing of Kenwood tanned felts, wherein each felt is designed and built to operate perfectly with the other, assures "lower felt cost per ton" whether the product be fine paper or boxboard.

F. C. HUYCK & SONS

KENWOOD MILLS, ALBANY, N. Y.

KENWOOD MILLS LTD., ARNPRIOR, ONTARIO, CANADA

KENWOOD FELTS

WILLIAMS SIZING PROCESSES

United States and Foreign Patents Pending

Economic Evolution

It is both foolish and hopeless to resist progress.

The automobile has displaced the horse and buggy.

Cellophane has displaced tinfoil for cigar wrappings and a thousand other uses. Why? Because it is better and cheaper.

That is why Williams Sizing Processes are here to stay,—and grow.

There is a Williams Process Size just suited to your individual requirements.

One style of shoes will not fit all kinds of feet. Neither is one type of size best for all kinds of paper.

Regular Sizings

You may have proven by years of experience and careful tests that a HIGH free rosin, a LOW free rosin or a NEUTRAL size works best with you. By a Williams Process, you can make any one of these.

Special Sizings

Exact and uniform combinations of rosin with other substances,—waxes, starch, silicate of soda, etc., for special purposes.

You may have an unusual amount of FOAM TROUBLE: — There is a Williams ANTI-FOAM Size.

You may have bad HARD WATER CONDITIONS:—There is a Williams Size especially adapted to this trouble.

Are you interested in SPECIALLY HIGH RESISTANCE TO WATER? Papers sized by a Williams Process Size have shown no water penetration after *100 hours.*

IMPROVED FOLDING QUALITIES? Yes, there is a Williams Size for this.

Williams Size is LIGHTER COLORED from the same grade of rosin, than boiled size, and being double felt filtered, is the CLEANEST of sizes for highgrade writings.

AND DON'T FORGET THE THOUSANDS OF DOLLARS YOU CAN SAVE ANNUALLY IN MAKING YOUR SIZE BY A WILLIAMS PROCESS AT VERY CLOSE TO THE BARE COST OF RAW MATERIALS.

Our Paper Mill Experience and Engineering Service are yours for the asking.

WILLIAMS SIZE AND SERVICE CORPORATION

SIX HUNDRED TRUST COMPANY BUILDING, WATERTOWN, NEW YORK

Making the total 64

Another Paper Company Installs the OLIVER HIGH DENSITY THICKENER

ILLUSTRATED above is an Oliver High Density Thickener which went into operation recently at the mill of the Provincial Paper Company, Port Arthur, Ont. This machine is handling unbleached sulphite stock, feed density being about 1.3% B.D. The discharge density of 24% A.D. meets the requirements of the bleaching system.

Oliver High Density Thickeners are cutting down costs and improving results wherever they have been installed. At another mill, for example, an Oliver showed these improvements over competing equipment:

Delivered regularly the specified 18% (and higher when required) A.D. consistency as against 14.5%.
Required 4.8 h.p. compared with 19.8 h.p.
Gave continuous, uninterrupted operation.
Operated with 1.7% B.D. feed as against 6%, thus preventing pumping troubles.
Reduced effluent losses to 0.4 lbs. per 1000 gals.
Delivered fluffy, ball-free stock, ideal for bleach penetration.

The large number of Oliver High Density Thickeners going into paper mills is not surprising. For these machines are doing a job better than it can be done in any other way.

OLIVER UNITED FILTERS INC.

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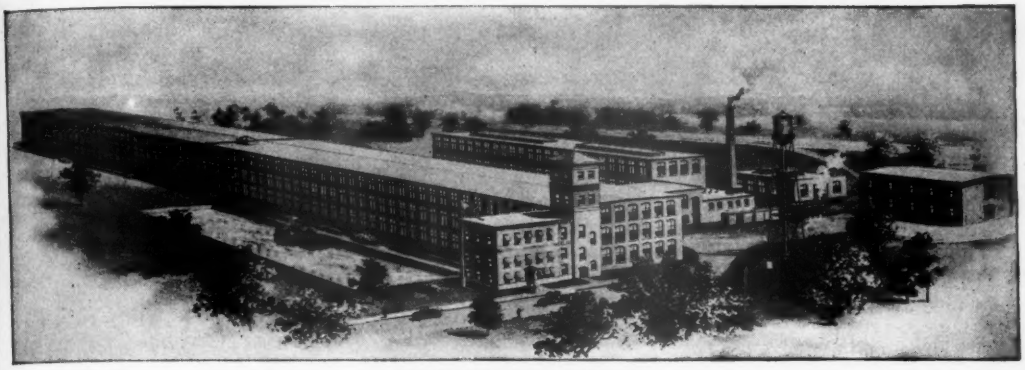

THE HOME OF ALBANY FELTS

Modern Felts for Modern Machines

With the conversion of pulp into paper growing more complicated every day, it is difficult to say what is the most important feature in the process. But it is generally admitted that the secret of good paper lies largely with the felts.

Every paper-mill man knows that, no matter what care is given the preliminary processes, his sheet will not have the proper qualities unless the right design of felt is adopted.

Our long experience in studying and interpreting the felt needs of individual mills has resulted in the creation of improved methods which are generally well in advance of common practice. In recognition of this, progressive paper manufacturers all over the country are consulting us constantly, giving us a greater range of experience and a broader vision, so that today Albany is one of the world's greatest felt makers.

Look to Albany for improved felt efficiency. And if you have a problem that is bothering you, we suggest that arrangements be made through us or our representatives to have one of our service engineers look the situation over.

Albany Felt Company

▶ ▶ ▶ ▶ ▶ ALBANY, N. Y.

Satisfactory Service!
at Your Command

PAPER MILL MACHINERY
For Your Particular Requirements

The Undercut Trimmer

An Automatic Clamping Cutter, conceded the BEST Trimmer for THE PAPER MILL, replacing other makes of cutters where accuracy and strength are a factor in efficient production with minimum cost of maintenance. Equipped with motor or pulley drive, and safety starting device as desired.

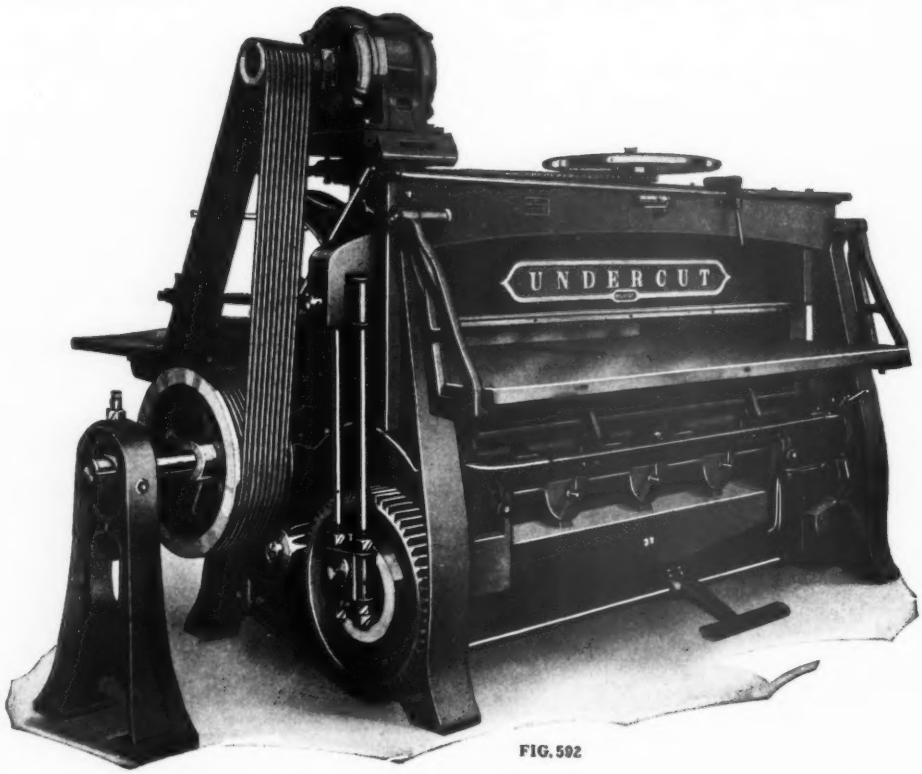

FIG. 592

THE SMITH & WINCHESTER MFG. CO.
Dept. MFP, SOUTH WINDHAM, CONN.

— PAPER BAG MAKING MACHINERY —

IMPCO

For Low Cost Handling of
—PULP—
THE REED-SPAFFORD SCREEN

The
REED - SPAFFORD
PULP SCREEN
is built in two sizes. With its large capacity and surprisingly low power consumption this screen is unusually efficient.

Improved Paper Machinery Corporation
NASHUA, NEW HAMPSHIRE

SHERBROOKE MACHINERIES LIMITED
Sherbrooke, Quebec, Canada

Save-alls	*Centrifugal Screens*	*Reclaimers*
Thickeners	*Reed-Spafford Screens*	*Washing Machines*
Filters	*Tailing Screeners*	*Special Machines*
Knotters	*Screen Plates*	*Cylinder Moulds*
Deckers	*Couch Rolls*	*Repair Parts*

CHLORAMINES FOR SLIME CONTROL

FOR SOME MONTHS Great Western Laboratories have been doing experimental work on the use of chloramines for control of slime in pulp mills. The widespread difficulties caused by slime and slime bacteria make its control and elimination a vital consideration.

Slime bacteria usually enter the mill in the raw water supply, or in a stock supply where they may be present in the stock itself. The result is that they collect and grow everywhere: in filters, making frequent backwash necessary; in head boxes, where the slime breaks away to form spots on the paper and frequently cause breaks in the machine; on the wire causing blinding and frequently carrying through to the drier train. Slime particles prevent close formation among the fibers, the bacteria attack and decompose cellulose — and the results are weak stock, frequently with material shrinkage, and pinholes where the slime particles are broken down by heat in the drier train.

Chloramines are highly effective in killing slime bacteria, preventing growth, and controlling odors. It has always been the aim of Great Western Electro-Chemical Company to keep pace with the Pulp and Paper Industry by meeting the Industry's problems with products and methods for their solution, and the presentation of Chloramines for slime control is simply another step in this policy. We shall be glad to answer inquiries with detailed information, and to assist in initial experiments and final installations.

GREAT WESTERN ELECTRO-CHEMICAL COMPANY

SAN FRANCISCO
SEATTLE
LOS ANGELES

PLANT:
PITTSBURG, CALIF.

Published by the Consolidated Publishing Co., in Seattle, U.S.A., on the 15th of each month—semi-monthly in March.

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L. K. SMITH, Manager
LLOYD E. THORPE, Editor
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INDEX OF ADVERTISERS

Albany Felt Co. ... 7
Appleton Wire Works, Inc. ... 60
Appleton Woolen Mills ... 62

Bartlett Hayward Co. ... 55
Beloit Iron Works ... 1
Biggs Boiler Works ... 62
Brubaker Aerial Surveys ... 62
Bulkley, Dunton & Co. ... 11

California Cotton Mills ... 60
Cameron Machine Co. ... 49
Carthage Machine Co. ... 61
Congress Hotel ... 43

De Guere, L. A. ... 64
Deister Concentrator Co. ... 58
De Laval Steam Turbine Co. ... 47
Downington Mfg. Co. ... 62
Draper Bros. Co. ... 48
Du Pont, E. I. de Nemours & Co. ... Inside Back Cover

Eastwood Corp. ... 56
Edison Storage Battery Co. ... 61
Elwell Parker Electric Co. ... 46

Ferguson, Hardy S. & Co. ... 64
Fitchburg Duck Mills ... 44
Foxboro Co., The ... 40
Freeport Sulphur Co. ... 53

General Dyestuff Corp. ... 57
General Electric Co. ... 2
Glens Falls Machine Works ... 61
Governor Clinton Hotel ... 58
Great Western Electro-Chemical Co. ... 10
Griffith Rubber Mills ... 62

Hamblet Machine Co. ... 57
Hardy, Geo. F. ... 64
Hardy, Wm. A. & Sons Co. ... 60
Hockley, C. C. ... 64
Hodges, Walter S. ... 59
Hooker Electrochemical Co. ... 3
Horne, J. H. & Sons Co. ... 46
Huyck, F. C. & Sons Co. ... 4

Improved Paper Machinery Co. ... 9
International Wire Works ... 62
Internationaler Holzmarkt ... 63

Jenssen, G. D. Co. ... 48
Jones, E. D. & Sons Co. ... 56

Kehoe, R. D. ... 54
Kuppler's Sons, Chris ... 64

Lindsay Wire Weaving Co. ... 62
Lockport Felt Co. ... 47

Merrick Scale Mfg. Co. ... 58
Montieum De La Papeterie Belge ... 63
Mundt, Chas. & Sons ... 53

Nash Engineering Co. ... 52
National Aniline & Chemical Co. ... 54
Neumeyer & Dimond ... 61
Newhall, Charles A. ... 64

Oliver United Filters Inc. ... 6

Pacific Coast Supply Co. ... 59
Pacific Gear & Tool Works ... 51
Paper Converting Machine Co. ... 52
Paper Makers Chemical Co. ... 58
Paper Makers Directory of all Nations ... 60
Papier Fabrikant ... 63
Papier Zeitung ... 63
Pennsylvania Salt Mfg. Co. ... Inside Front Cover
Pioneer Rubber Co. ... 55
Puget Sound Power & Light Co. ... 55
Pusey & Jones Corp. ... 49

Rice, Barton & Fales, Inc. ... Outside Back Cover
Ross, J. O. Engineering Corp. ... 34
Ryther & Pringle Co. ... 50

Schoenwerk, O. C. ... 64
Shuler & Benninghofen ... 53
Simonds Worden White Co. ... 44
Simons, V. D. ... 64
S. K. F. Industries, Inc. ... 57
Smith & Winchester Mfg. Co. ... 8
Stebbins Engineering & Mfg. Co. ... 56
Stowe & Woodward Co. ... 62
Svensk Travaru Tidning ... 63

Tacoma Electrochemical Co. ... Inside Front Cover
Terminal Sales Bldg. Co. ... 61
Texas Gulf Sulphur Co. ... 50
Tidmarsh, W. R. ... 45
Timken Roller Bearing Co. ... 36
Trimbey Machine Works ... 61
Turner Halsey Co. ... 51

Union Screen Plate Co. ... 59
Zaremba Co. ... 59
Zellstoff & Papier ... 63

Waldron, John Corp. ... 61
Waterbury, H. & Sons Co. ... 52
Western Gear Works ... 51
Williams Apparatus Co. ... 5

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What do you know about the vast Western industries which manufacture products, other than pulp and paper, from our forest raw materials?

Complete your picture now. Tear out this advertisement and mail it to us with your name and address. You will receive a sample copy of the only Western woodworking journal, together with a subscription offer.

Western Wood Worker & Furniture Manufacturer

71 Columbia St., Seattle, Wash.

THE BACKGROUND OF PULP AND PAPER

Every pulp and paper mill man who looks beyond the chipper and pulpwood pile, finds a most important field of vision. Forests, lumber, these form the background of pulp and paper.

Keeping apace of developments in the lumbering field, as directly affecting your business, is well worth while. This can best be done by reading the leading lumber journal, West Coast Lumberman, each month. Subscription, $3.00 per year, including the Annual Review. Canada, $4.00

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We act as sales agents and distributors for the entire output of Sulphite and Kraft Producing Mills.

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Mill agents and dealers for the distribution of all classes of paper in the Eastern markets.

BULKLEY, DUNTON & COMPANY

75-77 DUANE STREET

NEW YORK

The American Paper & Pulp Association

Opposes Alaska Development

AMERICAN PAPER AND PULP ASSOCIATION
NEW YORK

July 24, 1931.

Hon. Herbert Hoover,
The President,
Washington, D. C.

Dear Mr. President:

Your attention is respectfully invited to a condition which constitutes a menace to the Newsprint Industry and which it is within your power to remedy if, upon a consideration of the facts, you deem it wise to take the suggested action.

We refer to the pending negotiations for the sale of national forest timber in Alaska for conversion into newsprint together with the necessary water power rights. We are in hearty sympathy with the high motives of the government in undertaking to promote the commercial and industrial development of Alaska, and the paper industry looks forward to the time when the rich timber resources of Alaska will provide needed raw materials on a sound economic basis.

Under the conditions presented in the accompanying survey, however, we are firmly of the opinion that all pending negotiations should be dropped and that no offers of Alaskan or other national forest timber entailing paper or pulp mill construction, should be made until a need arises which does not now exist.

To thrust unwanted production upon an overexpanded industry struggling with a diminished demand and vanishing profits would make a bad unemployment situation worse and further depreciate a capital investment of over 800 million dollars in the United States, Canada and Newfoundland, of which more than 600 millions is estimated to have been invested by citizens and companies of the United States.

The survey shows that there could be no possible gain to the consumers of newsprint in price or service; that the present supplies of pulpwood are ample; and that the continental newsprint industry right now is equipped to produce two million tons in excess of the average consumption over the past five years.

We appeal to you, therefore, for suitable executive action to remove the disturbing threat of government timber in Alaska and establish it as a great reserve for the future.

Respectfully submitted,

AMERICAN PAPER AND PULP ASSOCIATION

JESSE H. NEAL
General Manager and Treasurer

PRESIDENT HOOVER has been embarrassed by the American Paper & Pulp Association. He has been asked to hold an executive umbrella with one hand over several hundreds of millions of dollars invested in foreign industries while putting a padlock on Alaskan pulptimber with the other hand. He has been asked by an internationally minded body to deny to Pacific Coast citizens an inherent right to develop regional natural resources into domestic payrolls.

The American Paper & Pulp Association has informed the President that until the present **continental** annual excess capacity of 1,700,000 tons of newsprint is absorbed "there is no need for expansion, especially in new regions". The American Paper & Pulp Association has in effect asked that an industrial death sentence be imposed upon the present generation of Pacific Coast peoples.

The American Paper & Pulp Association has accompanied its plea to The President with a brief depicting the North American newsprint situation. There is, in submitting the brief in support of the plea for executive clemency, an implied suggestion of unbiased authority.

The strange request of the American Paper & Pulp Association at this late date is difficult to understand for many reasons.

1. The trend toward continental overproduction has been apparent for at least five years.

2. The Alaskan pulptimber limits were opened for competitive bidding more than four years ago.

3. The successful bidders have already invested approximately a quarter million dollars in power surveys and timber cruises.

4. Alaska timber is ripe for cutting now and delay means economic loss to the public to whom it belongs.

5. Cutting is planned under rigid supervision which contemplates complete utilization and perpetual reforestation under scientific forest management. Present exploitation does not impair the value of the Alaskan forests as a reserve, but enhances this value thru increased yield possible thru regulated forest management.

6. The present international attitude of the American Paper & Pulp Association is distinctly in contrast with the domestic boundaries which the organization has previously emphasized.

7. The "American" limitations of the association raise doubt either as to the sincerity of its present sympathies for foreign industry or to the appropriateness of the organization's title.

8. Capital which has emigrated to develop competing industries in foreign countries has done so with full knowledge of attendant risks and has by its action renounced any right to protection in the United States.

9. Sympathy with foreign industries is entirely inconsistent with trade barriers being raised steadily higher against products of the United States.

10. Domestic pulpwood resources — including the Alaskan—are entirely adequate to the **entire** pulp and paper demand of the United States in perpetuity if permitted free play of development.

11. Alaska's long history of Federal repression entitles it in fairness to be spared further insult and justifies the authorization and encouragement of some degree of development of its timber resources NOW.

12. On authority it can be said that newsprint can be manufactured in Alaska and delivered in New York at the current price of $57 a ton at a profit.

STEEL

has something to say

to the Pulp and Paper Industry

STEEL is springing new surprises every day. The steel men have for years been mixing up the elements in new and varying proportions. And announcing some astounding results. Nor is it going too far afield to say the steel industry holds in the power of its research a profound influence on the future of pulp and paper manufacturing.

Go around the different mills today. Ask this mill manager and that what he knows about, what experimenting he is doing with, the new steels. Ask the purchasing agents what figuring their pencils have been busied with in the study of the new steels, pressed as they are these days by the management to make every penny that goes out of the cash register count to its fullest value.

Steel is coming! Its forerunners, its scouts, its pioneers are already here. There is no hazard at all in the statement that the next ten years will see the application of special steels to different processes in the pulp mill and the paper mill that will greatly alter the present conception of manufacturing costs.

Many operators are already sold on the idea of special steels for countless applications in the pulp-paper mill, where troubles with corrosion and excessive wear are recurring. Why then is not more special steel being used now?

"The price is too high." That is the almost unanimous complaint.

The price is not all. It is, however, a factor of sufficient importance often to outshadow other considerations. Analysis of the "why" for the comparatively small use of steel at the present time seems to bring out four major reasons.

FIRST, the excessively high first cost of the special steels.

SECOND, the extremely low cost of copper at present.

THIRD, the lack of confidence in the uniform qualities of the new steels.

FOURTH, the reluctance of pulp-paper mill managements under present uncertain business conditions to experiment.

What disposition is to be made of these objections? The extremely high prices now paid for special steels will not endure. They can not endure, for they are now admittedly a chief factor retarding further use. But, as research extends knowledge into the properties and methods of manufacture, these high prices will come down. If you don't believe that, take a look for comparison at the dollar's worth you get in radio today as compared with the advent of this industry into the domestic field right after the Great War. Further, the steel men right now are attacking this objection of high price with the intention of eliminating it.

The price of copper is something over which the steel men can exercise no control. The copper interests dug their own grave by jacking up an artificial price in recent years, thereby encouraging a disastrous overproduction and eventual collapse. Not to mention encouragement of research into steel. As a consequence of the low price of copper many items in the pulp-paper mill are going to be continued to be made out of copper and its various alloys.

Uncertain quality. This can be only a temporary factor. The steel reesarch men are sure to discover more exact methods. Whereas many of the special steels being offered today are excellent within limits, there is nevertheless a very pronounced hesitancy upon the part of industry in general to accept a new product wholeheartedly because of some examples of failure in performance.

Many Possibilities

With regard to the reluctance of management to experiment with high-priced goods which are not definitely proven, it is natural to expect a somewhat superconservative attitude in these days when the salesmen can't fill up their order books. It is noticeable, however, that some few more aggressive managements are demonstrating a courage in adopting the new methods, a courage that stands well to pay handsome dividends in lower operating costs. The objection of management to experimentation will crumble. The new idea is never at once taken into the family like a full blood brother, but acceptance is frequently overwhelming immediately after recognition. At least we can be certain that the special steel men are going to continue to push into the field.

As for the actual applications of special steels in the pulp and paper mill, the possibilities are legion. It is only necessary to review some of the present operating difficulties, particularly where problems of corrosion, excessive wear and replacement are predominant.

For example, it is freely predicted that the all-steel digester for sulphite pulp cooking will soon be here. Obviously, some knotty practical problems remain to be solved by the steel men before the all-steel digester is an accomplished commercial fact readily accepted. But progress is being made. Some pulp men predict the all steel digester within ten years, some within five,

while some steel men are already willing to undertake the building of a digester even now. Whether that digester will have a solid shell of special steel, or a special steel rolled upon or otherwise applied to the inside of a shell of common steel is not now known. Matters of seams, rivet holes, welding, require lots of study. One progressive pulp company on this continent is said to have an all-steel digester in operation even now. Some Pacific Coast pulp operators have been hanging blanks of special steel in their digesters to determine the resistance of the metal to the highly corrosive effects of the cooking liquors. Some tests have shown that where the steel has a high and perfect polish the metal has not been affected, but where the polish was imperfect or any initial pitting existed the corrosive action was quite rapid.

Grinder Room Troubles

In the grinder room Pacific Coast mills have a difficult problem in meeting the corrosive action of acetic acid peculiar to Western woods which grow under conditions of excessively moist climate. Corrosion of the pulpstone shafts and housing adjacent to the shafts has caused no few gray hairs and has driven mill managements to various expedients, such as brazing the affected parts, to overcome the trouble. Obviously a special steel will find a service here.

The acetic acid condition has also played havoc in other parts of the groundwood mill. In one mill it was found that after two years the concrete in its stock storage tanks had been badly eaten away and that the cast iron pipe which formed a part of the stock agitation system was eaten thru to such an extent that replacement was necessary. The iron dissolved from the pipe by the acid caused the pulp to turn black.

It may seem that in so far as concrete structures were concerned that steel would have no application. Wood tanks are of course an alternative, but there appears on the horizon now a process whereby metal—including the hard metals other than lead—can be applied to practically any surface as one would apply paint with a spray to wood. To contemplate such a process capable to spraying noncorroding special steels upon the inner walls of pulp storage chests is within the realm of practical conception. And what an application such a process would have in the pulp mill!

Steels that can be purchased today are so vastly improved over the iron products of yesterday that comparison is useless. The advance is an excellent testimonial for conscious, intelligent, directed research, suggesting at once the part that science plays in industry and the necessity of exploring new fields for those industries that would survive.

Steel has already found its way into the pulp-paper mill. It is significant that it makes entry in the most difficult and trying places. There are on the Pacific Coast already several installations of special steel drainer bottoms for blow pits in sulphite mills. The success of the metal bottoms is said to be pronounced.

A pulp mill now building has specified steel drainer bottoms and has also ordered special steels in many parts of the mill, such as in raw stock valves, pipe, and pumps. It is learned that even the manufacturers of heavy bronze valves such as used on sulphite blow lines are experimenting with special steels.

After all, what interests the pulp and paper manufacturer is that which will reduce the cost of his present goods or improve the quality of his product and thus enable him to reach new markets. If the new steels can do these things, and they give much promise of ability, they will find a ready acceptance for a multitude of difficult applications.

Acid pumps in both sulphate and sulphite pulp mills are particularly subject to corrosion and special steels are finding a way into the paper-pulp mill here also. One operator pointed out that a factor determining the use of bronze or steel in this connection was in the nature of the part. In castings involving quantities of metal on which the machining costs were insignificant the cheaper metals were preferred, even though only a short life could be expected. However, on those parts of the apparatus where machining costs were a major part of the whole cost special steels are specified, even when the costs of such steels was excessively high per pound.

Research Will Solve

Special steels are finding their way into other parts of the mill, entering at widely divergent places, such as metal parts in head boxes, suction box covers, table rolls on the fourdrinier, save-all trays under the wire, target plates in blowpits. Experiments are being made with steel for screen plates, now quite universally made of bronze. The accurately machined slots in the bronze plate wear out rather rapidly. A harder metal would be very desirable, but operators complain that as yet the steel men have not perfected a method of accurately machining the slots in steel.

But all these complaints against steel are only temporary. Not a problem but what research can be expected to solve. Steel is coming, the aggressive operator recognizes that, but he wants to be shown, to find profit in return for his adoption. He does not want to experiment for the other fellow out of his own pocket book.

Meanwhile, witness the advances of special steels in other industries. Steel is coming, and in its coming exerting a profound effect upon our lives, industrial and personal.

Priest River Pulp Mill Financing Announced

The Pacific States Pulp & Paper Company has completed financing arrangements with the George B. Caldwell & Company, 25 Broad Street, New York, and will construct a pulp mill at Priest River, in Northern Idaho, to manufacture 100 tons of bleached kraft pulp daily. It will first erect two plants for the production of sodium sulphate from deposits, the chemicals to be used in its own pulp mill and marketed to other pulp mills.

This news of financing arrangements and the company's building plans was given by Charles W. Beardmore, Priest River lumberman, and president of the pulp company. Mr. Beardmore has spent a great deal of time in New York recently in connection with the project.

The terms of the contract, which was closed on July 13, call for immediate payment to the Pacific States company of $100,000, an additional $500,000 within 60 days, and the balance at the rate of $200,000 per month during the construction period. Investment in the pulp mill will be approximately $2,500,000, it is reported.

NEWYORK NY AUG 1 135P
PACIFIC PULP & PAPER INDUSTRY
SEATTLE WASHN
PREFER NOT TO MAKE AUTHORITATIVE ANNOUNCEMENT REGARDING FINANCING AND ENGINEERING PULP MILL AT THIS TIME STOP COMPANY WILL CONSTRUCT MODERN ONE HUNDRED TON BLEACHED SULPHATE PLANT PRODUCING HIGH QUALITY PULP STOP TWO SODIUM SULPHATE PLANTS WILL BE CONSTRUCTED AND PUT INTO OPERATION FIRST STOP INDUSTRIAL ASSOCIATES INC ARE ENGINEERS
CHAS W BEARDMORE.

Asked for general details of the proposed mill Mr. Beardmore said that he preferred not to make a detailed statement at this time, but did say that the company would undertake the production of a high quality bleached kraft pulp. Comparatively little of this grade now enters into the total kraft paper consumption in the United States.

Mr. Beardmore states that Industrial Associates Inc. will be retained to engineer the mill. It was rumored at first that Hardy S. Ferguson & Company might be appointed. Mr. Ferguson's company has constructed two large pulp mills on the Pacific Coast within recent years. This rumor probably grew out of the fact that Mr. Ferguson was consulted by President Beardmore on matters of general manufacturing conditions in the industry and building and equipment costs at one stage of the development. This consultation Mr. Ferguson confirmed.

The company proposes to build the pulp mill on the site of the present Beardmore sawmill at Priest River and the sawmill will be operated in connection. Wood supplies for both sulphite and sulphate pulp are declared to be ample. Pine is a characteristic tree of the region, as contrasted with the Douglas Fir and Western Hemlock of the humid Coast region. Priest River is approximately 400 miles inland and a mountain range separates it from the ocean.

The company has acquired by purchase a control in the Naso Chemical Company which lists as principal assets the ownership of sodium sulphate deposits in "dry lakes" in Okanogan County, in North Central Washington. According to Mr. Beardmore, the company will develop its chemical deposits before building the pulp mill.

The Pacific States company had its origin in 1927 when L. E. Van Winkle and A. T. Peterson, with others, secured a site at Aberdeen in Southwestern Washington and announced intention to construct a sulphite pulp mill. After reported unsuccessful attempts in financing the company transferred its activities to Priest River about two years ago where Mr. Van Winkle had previously lived and was acquainted with Mr. Beardmore. No construction was ever undertaken at the Aberdeen site, altho some small amount of clearing was done on the site.

F. B. Oldham, vice-president of the George B. Caldwell Company, is reported to have been an influential factor in getting Mr. Beardmore and Mr. Caldwell together. Mr. Oldham is said to have been long connected with the pulp and paper industry.

Mr. Beardmore is in New York at this writing and is expected to remain there for several weeks.

Sulphite Pulp from Douglas Fir

Patent No. 1,805,799 has been granted by the U. S. Patents Office to Dr. H. K. Benson, head of the Department of Chemistry and Chemical Engineering, University of Washington, for a process for making sulphite pulp from Douglas Fir and other resinous conifers.

Considerable interest attaches because of the large volume of sawmill waste from the Douglas Fir lumber mills which has long held a potential value as pulpwood. At the present time Douglas Fir is used extensively in at least three Pacific Coast pulp mills making kraft and soda papers, but it is not used for sulphite pulping. The wood is a prime lumber species and has been THE basis of timber cruises in the so-called Douglas Fir region west of the Cascades from Southern Oregon into Southeastern Alaska.

Dr. Benson's method provides for the treatment of chips with a dilute volatile alkali liquor at a temperature below the decomposition point of cellulose and above the decomposition point of volatile alkali salts.

The patent holds that it can be shown that Douglas Fir contains certain organic components other than resins which are insoluble in sulphite acid cooking liquor, and which produce discoloration and weaken the pulp to such an extent as to make it noncommercial. Pretreatment with hot fixed alkali forms insoluble compounds which cannot be subsequently removed by the sulphite cooking liquor. Cold volatile alkali is effective in removing the resins, but the wood must be finelv divided by mechanical action, adding to the cost and weakening the pulp. If volatile alkali is used under pressure at too high temperatures, alteration of both cellulose and non-cellulose components may occur; and upon release of pressure from the hot batch, decomposition occurs of the volatile alkali resinates and other compounds.

The essential factor in this new process is the discovery of a temperature that is least favorable to the alteration of the components, that will not cause decomposition of the reacting products, that will make it possible to secure sufficienly rapid penetration and that will make it of practical use. For these purposes a temperature is used below 150 degrees C and above 70 degrees C. The temperature which has been found most practicable for quickness of penetration and other purposes is substantially 100 degrees C.

West Coast Pulps Winning Favor

Altho pulps from the Pacific Coast may have been a poor cousin in the pulp-consuming paper mills of the Midwest and Atlantic states a few years ago their popularity now is not to be denied. We asked a man who has a wide and intimate acquaintance with Eastern paper mills thru many years of travel in the territory what he heard about Pacific Coast pulp. He is a man who has never been to the Pacific Coast, knows none of the West Coast organizations, but yet has a wide acquaintance with the men who actually make the pulp into paper in the East. In other words, he is a qualified but absolutely unbiased judge.

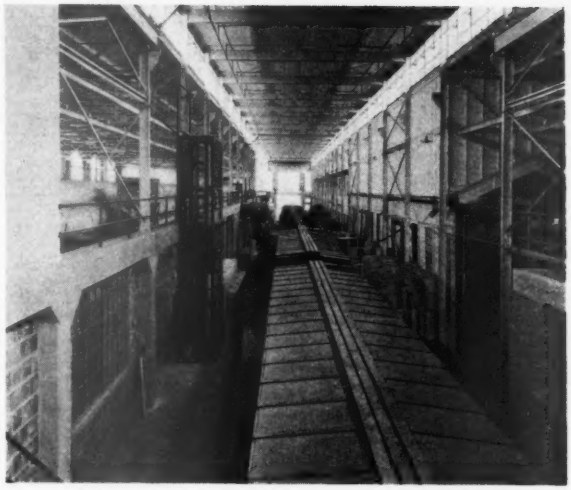
"West Coast pulp," he reported after making specific inquiry to a score of Eastern mills making news print, book, bonds, boards, and other grades, "was favorably received in the Midwest as soon as it was put on the market. The Eastern mills, however, were very slow to change to West Coast pulp, but they are slow to change their source of supply in any line and are now falling in line and using West Coast pulp to a considerable degree.

"Some mills that are using large quantities of West Coast pulp at this time and have been for some time are still prejudiced to shredded pulp and will not use shredded pulp now, altho they are using the identical pulp in sheet form. One West Coast mill's pulp appears to be outstanding. It has been an extremely high grade pulp from the beginning and is gaining favor continually. A certain mill in the Middle West that makes a very high quality paper, in fact they are the leaders in their field, now use this pulp and prefer it to the foreign pulp they formerly used, because of its superior quality for their particular needs. They probably will increase their tonnage on West Coast pulp as soon as their present contracts with foreign pulp manufacturers are filled.

"A certain mill in New England that has been an outstanding leader in the manufacture of book papers for many years was very slow to even try your West Coast pulp, but now uses large quantities of it, and plan on using more as soon as their foreign contracts are filled. Practically all of the book mills in the Midwest are using considerable Coast pulp now and give the bleached Coast pulp the preference over foreign pulps.

"All of the above information is for bleached pulp—it is extremely clean, the tear is high, the Mullen very good, and the fold also very good; in fact, there is no regular foreign pulp as good as these West Coast pulps; by regular, I mean the usual run of pulps, not one of the few specially prepared, specially cooked pulps made from selected wood, of which there are only a few.

"The unbleached Coast pulps are not so favorably received in the book mills as the foreign, but the board mills, news mills, and catalog mills, prefer it to any other pulp. There are several news mills that prefer the shredded pulp now coming into the market, which is proof that it is the pulp and not the shredding that tells the story. The book mills' reason for using less of the unbleached pulp is due more to price than quality; the different mills I talked to were very emphatic in their praising West Coast pulp in general. It is now safe to say that the West Coast pulp has captured the entire United States market, and are now crowding the foreign pulps out except where price is a big factor—where I used the term "foreign" pulp in this report I refer to European pulps and not Canadian. Canada, of course, supplies a large quantity of pulp for the paper industry and practically all of the pulp used in the rayon industry, and all pulp coming from Canada is of an extremely high grade."



Looking down the new loading platform of the Inland Empire Paper Company's recently completed building extension.

Inland Empire Has Some New Buildings

There is nothing to prevent architecutral beauty from being incorporated in the construction and design of industrial buildings. The advertising value accruing therefrom and the less tangible dividend in the form of personal pride for management and employes is well worth the slight added cost. At least there seems to be some agreement on this point between Waldo Rosebush, manager of the Inland Empire Paper Company and George W. Plaisted, Northwest manager of the Austin Company. Mr. Rosebush engaged the Austin Company to build a new warehouse and other buildings for this company at Millwood, Washington, recently.

With the application of a little trim in the way of terra cotta, by breaking up the rigid lines around the windows and doors and along the roof line, and by the use of colored mortar instead of the ordinary barnyard variety, and by the addition of some ornamental light clusters on the building exterior, the total result is a building that has "class" but which represents only the most inconsequential additional investment. It's like garnishing up a baked spud with a sprig of parsley and putting it on a piece of Wedgewood dinnerware. Same old spud, yet differently better.

The new warehouse has been designed with an eye to maximum utility. A rail spur runs into the building so that loading may be accomplished indoors.

Other improvements carried out at the Inland mill include the complete rebuilding of the wood room and the construction of a log pond into which the cars may dump the logs as they came from the camp. The grinder room has also been extensively modernized.

Here is Inland Empire's new warehouse, in which somewhat of beauty has been incorporated in the building as well as utility.

The Newest Machine---

St. Helens Company Installs Second Unit To Run Lightweight Papers at 1400 Feet

LIKE the little boy who described salt as that which "made the potatoes taste funny when you didn't put any in", so might the paper industry of today be defined when the essential essence of progress is eliminated. There is no standing still. Speeds of 1,000 feet per minute on the paper machine were yesterday regarded with awe. Today such speed is commonplace, and conquering the second thousand feet per minute has already reached semi-accomplishment.

And so with grades of paper. Progress and improvement, improvement and progress. Yesterday's best seller dissatisfies the customer today. It is significant that those organizations which have been most alive thru demonstrating a leadership in paper grades and in utilizing mechanical improvements offered by the builders of equipment have, in general, fared unusually well in the past two years when there has been much complaining about business.

MAX OBERDORFER
President and
General Manager
St. Helens
Pulp & Paper
Company

The St. Helens Pulp & Paper Company which in late 1926 began operation of a one machine, 60-ton kraft pulp and paper mill has in its few years of life gradually but consistently enlarged its facilities. A second paper machine has recently been put into operation and this, the major item of an improvement program, has enlarged the capacity of the mill to approximately 100 tons per day maximum and enabled it to offer to the trade light weight kraft paper items which are filling new uses.

In total the program now completed, which was carried out over a period of many months, included the installation of one additional pulp digester with auxiliary diffusing tanks, addition of eight Horne beaters to make a total of 18 for the mill, a new high speed paper machine with all auxiliary equipment, a new roll grinding room, and expansion of the finishing room.

The new machine was built by the Beloit Iron Works primarily for light weight papers to run at a speed of 1400 to 1500 feet per minute on light weight kraft. The wire is 202 inches wide and 75 feet long. The fourdrinier part is the very latest Beloit removable adjustable type.

Beloit has built into the machine its latest high speed shake, suitable for shaking at 700 strokes per minute. This high speed shake is said to make formation as perfect at 1400 feet with the shake running 700 strokes as in the old fashioned way of 200 strokes of the shake running at 400 feet per minute.

The couch is arranged so that the top felt picks the paper from the wire, carries it over the first press, which is a suction press bottom roll with rubber covered top roll. The web of paper then passes thru a second press when the machine is running on medium or heavier weight, but in running light weight papers the paper is picked off from the top felt by a 36-inch dryer on which creping can be done is desired. The drives on the first and second press are compensating so as to make the top and bottom press rolls run at the same speed and eliminate friction.

The machine has 18 dryers 60 inches in diameter supported in Norma-Hoffman anti-friction bearings, the dryers driven with Beloit special chain. The chain feature, involving no gears, is advanced by Beloit for high speed on very light weight papers because the back lash possible on gears does not occur when chain is used to tie the dryers together. The paper is carried thru the dryers by an automatic feeder arrangement. Vickery doctors are used thruout on the machine.

The calendar stack is arranged so that the roll can be used when running on a finished sheet or bypassed when running on a crepe sheet.

The Aldrich improved automatic reel which takes the paper automatically and delivers the finished roll into stands outside of the reel requires no handling by the operator.

Turbine Drive

The Beloit double drum winder has steel drums arranged and balanced for very high speed. It has a slitting arrangement which permits making counter rolls, right on the machine, or jumbo rolls. In the latter case there is an automatic device to deliver the rolls to the floor, table or truck with no handling by the operator. The winder has a friction brake controlled by air from the operator's stand.

The driving units and auxiliary equipment are installed on the floor below the machine room. The drive consists of a Terry Steam turbine developing 250 h.p. at 360 r.p.m. and operating under a head of 200 lbs. of steam with 22 lbs. of back pressure to the dryers. The drive is of the Beloit spiral bevel type with no

Here is the new No. 2 Beloit machine at St. Helens Pulp & Paper Company, looking down the drive side from the finishing end.

loose pulleys. The gears are steel hardened and ground perfectly true. They run in a bath of oil and are entirely concealed. The clutches are of the magnetic type controlled by a push button from the front of the machine. The belt shifters are handled by electric motors. Due to the ease with which the machine runs in its anti-friction bearings a Cutler-Hammer magnetic brake has been installed on the dryer chain drive to obtain a positive control of the machine's momentum.

The turbine exhausts to a Baxter drying system wherein the entire steam supply of the machine is admitted to the main section of the steam header and enters the 13 paper dryers and three felt dryers connected to this section. Part of the steam condenses in these dryers and a part blows thru along with the condensate into the return header. From this point steam and condensate are separated and the steam is passed on into the other dryers.

Mill Flexibility

The constant speed shaft on the new machine is driven by a 250 H.P. General Electric synchronous motor. Other equipment auxiliary to machine operation includes two Nash Hytor vacuum pumps, one for the suction presses and one for the suction boxes. A Hayton fan pump delivers white water to the machine and a Trimbey regulator controls the consistency of the stock.

The stock flows to a machine thru a Voith high pressure stock inlet and is refined in two large Bird screens. There are three large Horne jordans, each driven by an individual General Electric synchronous motor. The machine has three Stowe & Woodward rubber covered press rolls as follows: first press, second press and rubber covered roll on top of the cold dryer.

A Voith shredder is installed in the basement for convenient repulping of broke and trim.

A wing built at right angles to the dry end of the machine has been fitted with a Farrell roll grinder capable of handling press or calendar rolls on a 202-inch machine.

The paper machine is operated with a white water filter manufactured by Filtration Engineers, Inc., and driven by an electric motor thru a Cleveland gear and with a variable speed control. The face wire is phosphor bronze with a guaranteed two year life and the pulp is delivered from the wire to repulper by strings at any pre-determined consistency. Under test the St. Helens installation of this filter has shown a remarkably small loss of fibre thru escapement.

With installation of the new machine the St. Helens Pulp & Paper Company is given a greater flexibility and is prepared to meet a varied demand for kraft papers ranging from super heavy sheets used in multi-wall bags for cement and kindred bulk products down to the lightest weight tissues used for fruit wrap and similar purposes. Max Oberdorfer, president and general manager, with the installation of the second machine, is following a policy long since adopted by this organization for working out of the mass production items into the field of specialties, a policy which is directly in step with progress.

Tissue Company at Camas Asks More Space

The Tissue Company of Saugerties, New York, which recently established a converting unit for the manufacture of high grade paper napkins in the mill of the Crown Willamette Paper Company at Camas, Washington, has asked the paper mill company for more space, in which to expand its operations.

The plant started with one machine, but has three in operation now. The Tissue Company is now seeking the entire southern end of the building it now occupies. In addition to greater space requirements for its manufacturing the Tissue Company needs more space for its stocks, both of local manufacture and for other items manufactured in the New York plant.

O. J. Leloff, local superintendent for the Tissue Company, predicts further expansion in view of the satisfactory progress already made by the Camas unit.

The Backus interests, controlling among other properties the Minnesota & Ontario Paper Company, and reputedly in some financial distress in the recent miseries of the news print industry, are said to be nearly ready with a reorganization plan. Premier Henry of the Ontario government, in which province the Backus interests hold a vast "timber empire", is rattling a sword in advance of the Backus reorganization announcement, indicating that agreements have not been lived up to. Backus companies claim assets of $95,000,000, it is said.

Higher Freight Rates---

If Northwest Railroads Impose Arbitrary Increases They May Lose Cream of the Coast Pulp-Paper Tonnage

RUMBLES of dissatisfaction with the existing order of things in railroad circles has taken definite form in a plea to the Interstate Commerce Commission for a 15% increase in railroad rates. Growing competition of the bus and private automobile for passenger traffic and of the motor truck, subsidized waterway, and pipe line for freight traffic has caused the railroad Goliath to groan. What will such an increase mean to the pulp and paper mills of the Pacific Northwest?

As long as the West Coast pulp mills must enter into sharp competition with European and Eastern Canadian pulp mills for sales to paper mills in the Lake and North Atlantic states, an increase in freight rates is a serious thing. Altho blessed with cheaper wood costs the Pacific Coast mills have a weighty handicap in the burdensome freight rate they must bear in transporting their pulp the many hundreds of miles to markets in Wisconsin, Michigan and Ohio territory, a strictly rail competitive area.

Other Routes

It would be well for the railroads serving the Pacific Northwest to bear in mind the basic nature of the woodpulp industry on the West Coast and to do the utmost in assisting that industry. Upon the welfare of the pulp industry depends so much the general welfare of the region, and that can be translated directly into terms of profitable ton-miles of freight. Any arbitrary increase in freight rates on woodpulp out of the Pacific Northwest should be compensated for in the creation of lower commodity rates on pulp. It now costs $10 to $13 to get a ton of wood pulp into the Midwest market, a cost which the pulp manufacturer in the Far West must absorb before he can compete with pulps coming in from Scandinavia or Eastern Canada.

Fortunately, the Pacific Coast mills, almost without exception, are not entirely at the mercy of the railroads. Most of the mills have their own deepwater docks over which they load pulp for the Atlantic coast market. The official rate now quoted is $5 per ton—altho the hunger of the shipping companies to get tonnage for their vessels has put an awful pressure on water freight rates, and prices inside of $5 are strongly suspected.

The water route, while making available the markets close to the Atlantic seaboard, involves a rail backhaul in nearly every instance upon which there are definite limitations. A point of balance between the economies of straight rail, or water-rail shipments of pulp is found somewhat to the eastward of the Lake States territory. The effect of an arbitrary 15% raise in the all rail rate might be to divert more tonnage to the water route, with the Eastern railroads getting the only benefit on the backhaul and Western railroads hauling an increased number of empties.

Further, at the time this is written, a pulp shipment of 350 tons is enroute from a Pacific Coast mill to an Ohio point, moving entirely by water. It goes via the Panama Canal to New Orleans, and from there up the Mississippi and Ohio rivers by barge. The rails don't get a nickel out of it. That, also, is something to consider.

No constructive purpose will be served in driving the railroads into bankruptcy. They are a vital part of the national economy, particularly due to the vast number of investors, mainly, insurance companies, which hold rail securities. However, there is nothing new in the criticism that a greater degree of aggressiveness in adjusting to changing conditions could be demonstrated by the railroads.

The motor truck, offering new advantages for shippers, is rapidly increasing the tonnage of finished paper it is hauling to market for Pacific Northwest mills, thus affording the paper mills with an effective weapon to be used against higher rail rates. This motor truck influence was mentioned in the report of the committee on "Paper, Paper Products and Pulp" in forecasting the car requirements for the third quarter of 1931 to the Pacific Northwest Advisory Board.

C. B. Richards of the Hawley Pulp & Paper Company, and W. A. Brazeau of the Inland Empire Paper Company, who prepared the report for this committee, reported as follows:

Truck Shipments

"There are several factors which must be considered in forecasting car requirements which may affect the forecast to considerable extent. On account of the frequency of service in truck transportation and the elapsed time enroute, many customers are changing from rail to truck service. Paper in carload and less than carload quantities is being transported by truck over the entire Northwest territory and as far east as the short-line territory. There is also a heavy truck movement from steamer landings to interior points which is growing steadily, and this competition has so affected rail movement that it is difficult to give a reliable forecast of car requirements."

The mills are not playing favorites with the motor truck without reason. For example, one news print mill which formerly shipped its rolls to a nearby customer by rail is now using trucks. The truck is able to back right up to the mill warehouse, roll the news print on, and roll it off again at the other end. There is no need to spot cars, no need to truck the heavy rolls to the deep end of the box cars, no need to repeat the performance in reverse at the other end. The truck is saving the mill money.

As for wrapping paper, many mills make quick delivery of orders to customers along established truck routes. The trucks pick up the shipments at the mill's own door and frequently make store door delivery at the other end the next morning. The truck affords a much greater degree of flexibility, permits mixed ship-

ments, eliminates much waste motion, and is very often much quicker.

It is solely because the motor truck is offering a better service or lower cost that it is getting the paper mill's business.

While on the subject of shipping it is encouraging to note that the forecast for the number of cars required in the Pacific Northwest territory for the third quarter of 1931 is 10.8% over the actual number of cars loaded during the same quarter in 1931.

The "Paper, Paper Products and Pulp" committee, in addition to commenting on the increased use of the motor truck, made the following observations:

"There is, at the present time, an upward trend in the paper industry, both local and transcontinental, and which, according to reports received from the various committeemen, will continue for some time. However, the increase should be considered only as seasonal and not as permanent. The season for the movement of fruit wrapping paper to the fruit growing districts is near at hand, and the flow of this commodity will be largely responsible for the estimated increase in carloadings for July, August and September. This movement will extend into Montana, Colorado, New Mexico, Oklahoma, Texas and Arizona as well as to the fruit growing districts around Walla Walla, Wenatchee and Yakima. There is also a decided quickening of sales for newsprint and wrapping paper, especially to the southwest territory where the stocks held in warehouses are being turned as rapidly as possible.

Changed Buying

"Our car requirements will also be affected by competition from the Wisconsin mills, as considerable movement will originate in that section for delivery in Washington fruit growing districts in competition with Pacific Coast products.

"There is also a heavy movement of newsprint and wrapping paper from foreign countries which is affecting domestic produce and likewise the carloading.

"Another element which now affects carloadings is the fact that the customers are buying in smaller quantities, whereas they previously held large stocks in warehouses. Now they allow the mills to carry the stocks which are drawn on as they are needed. However, the carriers are coming to the aid of the paper industry by granting certain privileges and rate adjustments which we trust will prove beneficial to the Northwest paper industry in general, which will have the effect of increasing movement of those products.

"The actual loadings for July, August and September of 1930, and prospective loadings for the same period of 1931, follow:

	Actual Loading 1930	Prospective Loading 1931
July	671	743
August	771	854
September	790	875
Total	2232	2472

New Pulp Rates To Atlantic Coast

An emergency rate of 25c per 100 pounds on eastbound shipments of wood pulp from Pacific Coast ports was quoted by the Luckenbach Steamship Company effective July 9, 1931. The rate expires on December 31, 1931. An important difference in the new rate which is beneficial to the pulp shipper is the higher minimum on baling. The new rate applies on wood pulp not exceeding 60 cubic feet per ton of 2,000 pounds in lots of 350 tons or over. The shipping companies formerly stipulated a density maximum of 51 cubic feet per ton, but many pulp companies found it difficult to compress their pulp to that degree economically.

Spaulding Mill Makes All Water Shipment

An all-water shipment consisting of 350 tons of sulphite pulp was sent out by the Spaulding Pulp & Paper Company of Newberg, Oregon, in July. It was consigned to a paper mill at Cincinnati, Ohio.

It was loaded onto a barge at the mill, towed to Portland by a Willamette River boat, Northwestern, of the Salem Navigation Company, through the locks at Oregon City to Portland, and there was transferred to the steamer Point Montara, destined via Panama Canal for New Orleans. At that port the pulp will be placed on another boat and taken up the Mississippi and Ohio rivers to Cincinnati.

The Intercoastal Pulp-Paper Movement

THERE'S a story of the developing importance of the Pacific Coast, both as a manufacturer of pulp and paper, and as a distributor of the latter, in the statistics published by the United States Shipping Board, Bureau of Research. As an example, the statistics for the last quarter of 1930, released late in June, can be studied.

Take Portland, Maine, that premier pulpwood-consuming state of the Union. We find that 1,440 tons of paper stock and manufactures were landed in the quarter. Of this amount 968 tons and 464 tons came from Anacortes and Tacoma, Washington, respectively, both of them pulp mill towns. Meanwhile, however, the Maine port shipped out 2,264 tons of paper stock and manufactures, 90% of which was landed at California's two main cities, Los Angeles and San Francisco. We are safe to assume that most of Portland's outbound shipments were finished papers going into the Southwest market.

Pulp for Boston

Dropping down now to Boston, centering around which in the New England territory are a great number of paper mills of all kinds, we discern an inbound shipment of 16,843 tons of paper stock and manufactures for the quarter. Of this, one-fourth of the total originated in California ports, indicating undoubtedly base stocks other than woodpulp. But, looking to the cargoes originating in Oregon and Washington, we find around 1,000 tons out of Portland, with Washington ports loading out for Boston as follows: Longview, 2,885 tons; Grays Harbor, 477 tons; Anacortes, 128 tons; Everett, 1,145 tons; Port Angeles, 2,480 tons; Port Townsend, 262 tons and Tacoma, 3,903 tons. Pulp and paper mill towns, every one of them.

Boston shipped out, in the same period, 1,743 tons, practically all of which was absorbed by the California market.

New York shows a total of 19,848 tons of paper stock and manufactures inbound. Some 2,300 tons originated in California, 275 tons came out of Coos Bay, where one pulp mill is located, 4,500 tons originated in Columbia River ports in Oregon, and 13,000 tons came out of Washington. Of the Washington shipments, 1,928 tons were from Longview; 661 from Bellingham; 202 from Everett; 500 from Port Angeles; 1,421 from Port

Townsend, and 8,303 from Tacoma. In the same three months New York originated 6,656 tons of intercoastal cargo, almost all of which was landed in Los Angeles and San Francisco.

Philadelphia, also a hub for paper manufacturing, received 11,506 tons of paper stock and manufactures during October, November and December, 1930. Portland, Oregon, shipped 627 tons, while Washington ports accounted for in excess of 10,000 tons. Of the Washington ports Longview shipped 1,344 tons; Grays Harbor, 1,612 tons; Everett, 411 tons; Port Angeles, 2,702 tons; Port Townsend, 2,665 tons, and Tacoma, 1,961 tons.

In the quarter Philadelphia shipped out 7,276 tons of cargo under the paper stock and manufactures classification, 5,600 tons of which went to California ports, and 1,273 tons of which went to Seattle.

Baltimore shows an inbound intercoastal traffic of 3,575 tons, divided as follows: Grays Harbor, 488 tons; Bellingham, 390 tons; Everett, 493 tons; Port Angeles, 1,494 tons, and Tacoma 544 tons.

South of Baltimore on the Atlantic Coast the inbound and outbound shipments of this classification are negligible.

A Growing Traffic

Jumping over to the Gulf ports we find 619 tons coming in to Tampa, Florida, originating principally at Los Angeles, Portland, and Longview. Mobile, Alabama, in the Southern kraft paper mill area, shows 1,057 tons moving out. Of this 526 tons went to Los Angeles, 246 tons to San Francisco. Seattle and Tacoma took 150 tons between them.

New Orleans shows only 543 tons inbound. Outbound shipments at New Orleans were 1,333 tons, three-fourths of which went to California, and most of the remainder to Seattle.

With the manufactures and markets tributary to the different ports kept well in mind it is easy to paint a picture of the nature of the traffic in more detail than given in the U. S. Shipping Board's cold and all-embracing statistical classifications, "Paper Stock and Manufactures". Analyzed in bulk the statistics show a good volume of wood pulp moving out from the Washington and Oregon ports to North Atlantic Coast territory. Along with this bulk of pulp, however, is a fair volume of kraft paper, test liner and container board. Moving to the West Coast are many grades of paper made in the more specialized mills in the North Atlantic territory, with also some tonnage of kraft coming from the Southern mills to compete with Pacific Coast kraft.

The statistics refer to cargo tons of 2,240 pounds.

DEPARTMENT OF COMMERCE OF THE
UNITED STATES OF AMERICA

Bureau of Foreign and Domestic Commerce
Office of Trade Commissioner

Yorkshire House, Corner Pitt and Spring Streets
Sydney, Australia

To the Editor of PACIFIC PULP and PAPER INDUSTRY:

There is definite interest here in the development of the paper manufacturing industry in the Pacific Northwest, and we can assure you that your annual publication will have very good use. We have found that the annual numbers of publications like yours are of value to us from one edition to the other, as the annual reviews incorporate statistics on the industry concerned, which one does not find any place else; it is the detail of the particular section which is of interest.

Very truly yours,

JAMES E. PEEBLES,
American Trade Commissioner
Acting in Charge

JEP/VV.

Rainier Pulp Predicts Better Earnings

Rainier Pulp & Paper Company, operating a 150-ton specialty bleached sulphite pulp mill at Shelton, Washington, reports a net profit of $65,535 before extraordinary expenses and losses for the fiscal year ended April 30, as against a net profit of $479,623 for the previous fiscal year. Extraordinary expenses and losses amounted to $235,654, however, resulting in a final net loss of $170,118 for the year of the report.

In his report to stockholders, released during July, President E. M. Mills said that since the close of the company's fiscal year, operations have been on a profitable basis and prospects are that, despite the continued unfavorable condition of the general pulp market, the current fiscal year will show a substantial profit. He added:

"The busines of the company was radically changed during the past fiscal year. Because of the low price and low demand for the ordinary run of paper pulp, efforts were made to develop special pulps for which a better market could be found. These efforts were successful, and the company turned from the production of ordinary sulphite pulp to the manufacture of pulps suited to the manufacture of special lines of paper and of rayon, cellophane and other products.

"In order to make necessary plant changes the mill was shut down for over 60 days, and resumed operations on May 12 with sufficient orders on hand to engage its entire plant capacity for several months. Since the close of the fiscal year, the plant has been operating twenty-four hours a day.

"A bond isue of $2,500,000 was authorized during the year, of which a proposed issue of $500,000 was offered to stockholders for subscription. The purpose of this issue, a part of which has now been subscribed, was to provide funds for necessary plant changes and for additional working capital."

Events In Japan's Pulp Industry

Attention has recently been drawn to the continued large imports of woodpulp into Japan and certain of the larger paper interests have approached the Government to impose a higher rate of duty. The Oji interests are believed to be at the bottom of it, but one can not predict what will be the outcome of the proposal seeing that the Mitsubishi interests more or less control the Government.

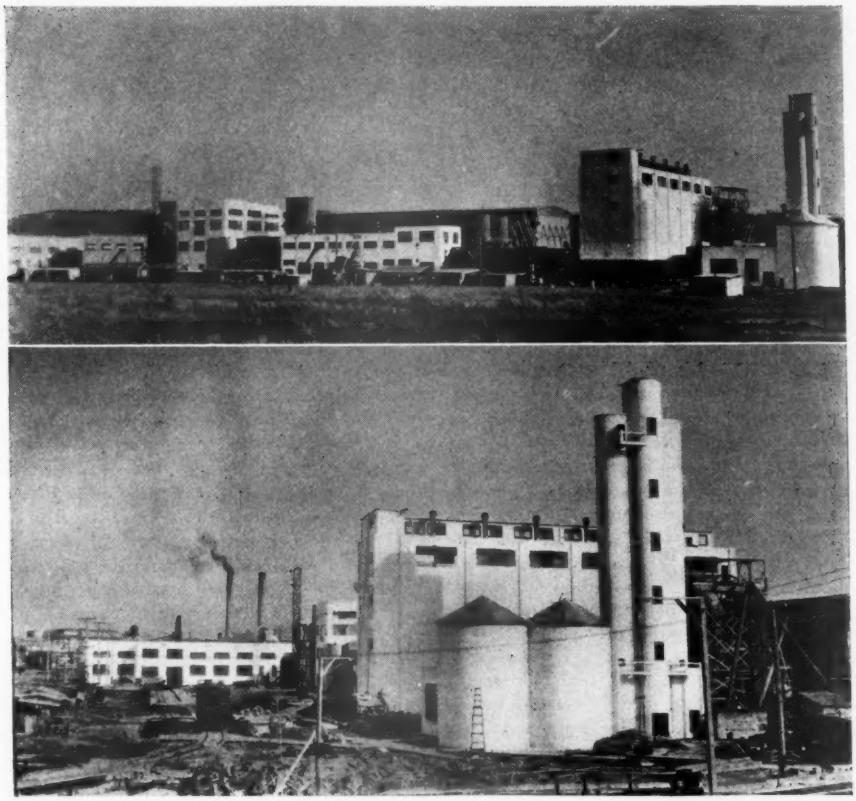
The Oji Company, it is understood, has recently completed plans to erect a pulp mill in Shika, Karafuto. Output will be 20,000 tons yearly and 2,040 acres of land have already been purchased for the site. The company has secured also a franchise to cut 7,200 million board feet of lumber for material.

The northern part of Karafuto is gradually becoming a commercial center and it should not surprise if a rayon mill were built there in the near future. Plans have been tentatively made, it is said, but nothing has yet been definitely arranged. It may be that Oji intend to manufacture a rayon pulp.

AND SO SAY WE

What earthly use is the immense treasure of inactive gold that fills the vaults of the money temples, if enterprise be restricted through heavy interest rates? Commodity prices have fallen considerably within the past few years, but the money-lender sticks out for his six-and-a-half or seven percent per annum for the use of his "commodity", which is cash. Eggs are down—away down—Interest stays up.

—Sir J. Stamp, British Economist.



Two recent views of the new 150 bleached sulphite pulp mill that Weyerhaeuser Timber Company is building at Longview, Washington, showing progress of construction.

Weyerhaeuser Construction Moving Ahead

Construction is moving right ahead on the new 150-ton high grade bleached sulphite pulp mill which the Weyerhaeuser Timber Company is erecting at Longview, Washington, to operate in conjunction with its extensive lumbering operations there. Prospects are that the mill will get into production sometime this Fall.

Most of the building work is now completed and Chris Kupplers' Sons, contractors who did the construction, are now winding up on a warehouse and chip storage building. Acid plant, digester building, screen rooms, bleach plant, machine room, and filter plant, all of which are essentially concrete construction, have been completed. Buildings which house equipment have been painted a brilliant white.

Work on the digesters and the acid accumulators for the Chemipulp system was coming to a close at the end of July. Pulp screens were all in place and the Minton vacuum dryer was rapidly taking shape at the end of the month.

A new warehouse, which will be mill type wood construction, is under way adjoining the machine room. Piles have been driven for this unit. The warehouse has been so designed that outgoing pulp shipments can be handled with great facility by water or by rail.

The mill as a whole presents a straight line production. At one end is the big water filter system, one of the most modern and extensive to be installed in a pulp mill. The water supply will be drawn from wells tapping a never failing supply of fresh water in the sands beneath the company's mile-square industrial site on the Columbia River.

Proceeding from the filter tank the mill marches away in the following order: acid plant, digester building, stock storage tanks, screen room, bleach plant, another screen room, stock tanks, machine room, and warehouse. The wood room and chipping plant are located adjacent to the main lumber mills. A huge storage bin is being constructed of timbers, with saw tooth arrangement at the bottom of the bins to facilitate classification of the chips and loading on the conveyors.

The mill is using a considerable amount of wood in its construction for such purposes as stock chests and pipe. Timbers are being supplied by the Weyerhaeuser's own lumber mills.

The mill will discharge its waste liquors into the Columbia River which, at Longview, is a very large stream, navigable by deep water shipping. Disposal plans have been approved by the state authorities charged with matters of fisheries welfare and sanitation. The liquor will be collected in reservoirs and discharged at intervals over the river dike.

R. B. Wolf, formerly president of the Pulp Bleaching Corporation, who resigned to take charge of the Pulp Division of the Weyerhaeuser Timber Company, returned to Longview July 17 after an extensive visit in the East and immediately plunged into the mass of work which had accumulated in his absence.

The complete pulp staff has not yet been announced.

The water board of the city of Bellingham, Washington, has authorized a one-fourth of a cent increase in the water rate charge to Pacific Coast Paper Mills, which will be effective until April, 1932.

Prior to about one year ago the mill was being supplied water at the rate of 2c per 100 cubic feet. For the past year it has enjoyed a rate of 1½c, which was granted in anticipation of greater use thru plant improvement and expansion. The general business depression was claimed by Victor Hughes for postponement of the company's plan of enlargement.

Under the new rate the company will pay 1¾c per 100 cubic feet of water consumed.

With further reference to

A Duty on Pulp

By FOLKE BECKER
Manager, Rhinelander Paper Company

I READ with great interest the letters by various paper company executives published in your July issue. I note that all of them, with the exception of your humble correspondent, express the view that a tariff on foreign pulp would be undesirable. That attitude is understandable as most of us are buying cheap foreign pulp right now and it is human nature to want to buy things cheap. One of these gentlemen mentions his republicanism. That causes me a bit of uneasiness. I am a republican too, but not one of as long standing as this man's. I was born and brought up in Europe and only joined the party upon receiving the right of citizenship a few years ago. I had supposed that one of the fundamental tenets of republicanism was a tariff to protect our industries, not only the paper industry, but manufacturers of pulp and in fact all our industries. Perhaps I have misunderstood. I should be glad to be enlightened.

Foreign Pulp Not Superior

Another gentleman observes that domestic pulp is inferior to the foreign brand and intimates that the future will be rather desolate for him and his, if he is compelled to pay more for it. I do not think that foreign pulp is inherently superior to ours. There is no appreciable difference in the fibre and quality of the wood from which it is made, that would sustain such an argument. To say that we, in this great country, lack brains and ability to make as good pulp as our European brothers is an affront to patriotism and a challenge to every American in the pulp manufacturing industry.

Another writer expresses consternation at the spectacle of American timber owners slaughtering their holdings in a suicidal effort to strip their lands of what should be great natural resources. The free entry of foreign pulp has a bearing on this, although I do not claim it is the main cause of this race to devastate our forests. The less money these timber owners receive for their product, in competition with the cheap foreign raw material, the more they are compelled to sell in order to pay carrying charges, etc. This brings me to the real underlying reason for the rapid depletion of our timber resources. In my opinion it is caused by our taxation policy on timber lands. To say that it is insane is scarcely too strong a statement. Here is our government spending millions and millions each year to grow forests in a more or less artificial manner and at the same time telling the owners of forests in effect that they must cut them down rapidly or their property will be taxed away from them. I fully recognize the difficulty to be encountered in replacing the present taxation system by a severance tax which is the logical and sensible method of taxation as practically all European countries and Canada have already discovered. That difficulty must be met and overcome however.

I do not want to get too far away from the discussion of a tariff on pulp, but the gentleman's remark about slaughtering timber, touched me on the raw. I would suggest that a questionaire be sent to American timber owners who after all are more numerous than paper manufacturers and find out how they feel about the free entry of foreign pulp. While we are at it, it might not be a bad idea for us to get the reaction of the men who have lost their jobs in our pulp mills.

I am no radical. I like to make a dollar as well as the next man. I want my company to prosper and I like to buy my raw material cheaply. If I have to curtail operations in our pulp mill to an even greater extent than I have, I shall do it. If necessary I will go over entirely to the use of foreign pulp as some of my competitors have. Nevertheless that does not prevent me from trying to view the larger and longer term aspects of the situation. Brushing aside the manifest unfairness of permitting seaboard paper manufacturers to buy partly manufactured raw material free of duty and at the same time permit their finished product to be intrenched behind a tariff wall applying to all grades of paper except newsprint and disregarding the advantage thus given the Eastern concern over the middle-West producer on account of low ocean freights, there are other major general objections.

Make it All Free

If the manufacturer of pulp is to be forced into competition with the cheap foreign product, there would seem to be no logical reason why other branches of the paper industry should not be subjected to it. There is a great body of opinion opposed to the principle of protective tariffs. Does the paper industry wish to aid and abet these forces which are selfishly interested in reducing or eliminating this protection? If it does, opposing a tariff on pulp is a big step in that direction. To discourage the manufacture of domestic pulp and encourage the importation of the foreign article is tantamount to our future dependence upon the latter. As stated above, one manufacturer has already acknowledged that he is dependent upon foreign pulp because of its superior quality. Is a condition of such dependence a good foundation on which to base our industry?

The denuding of our forest areas is admittedly a matter of paramount concern. Are American paper and pulp manufacturers going to be encouraged to undertake reforestation projects and adopt other timber conservation policies when they can buy foreign pulp for so much less than the legitimate and reasonable cost of securing the domestic product under American standards of living? I do not believe so.

It seems to me that there can be no enduring prosperity in the United States unless substantially all our citizens share it. As a nation we are accustomed to subsidizing in one way and another great sections of the people. Manufacturers are subsidized by tariffs. Pub-

Turn to page 31

Dividing the Machine Building Job

Specialization and Cooperation Improve the Product

By JAMES A. CAMERON, President
Cameron Machine Company

IN the Gay Nineties, the hard working salesman drove up to the front door of the paper mill in his fringe-topped buggy, tied his horse to the hitching post and walked in to meet the Chief. The Chief did his daily work among such "modern" aids to better business as side-cranking wall telephone, open flame gas jet, filing system consisting of jumbo files, pigeon holes and sharp pointed spindles, as well as a brutal letter press for making carbon copies and a palm leaf fan for cooling one's self after the carbon copies were made.

When the salesman arrived he was usually thirsty and after his thirst had been quenched he proceeded to sell the Chief every requirement necessary from the wood pile clear through to the finishing room, with everything in the mill taken in on the way.

After the Chief bought everything from the office supplies to chemicals, he proceeded to take a personal interest in the application of his purchases and he acted alternately as treasurer, chief accountant, woods manager, chief chemist, mill superintendent and what have you. Woe be unto anyone who changed his time-honored methods even if close application to the task in hand had convinced the employe of the necessity of newer and better methods.

Specialized Study

Economic necessity changed all this and the Chief gradually appointed competent men who were left to make their own improvements in methods, but who were held absolutely responsible for results.

Now, in 1931, the investment in one department—the machine room—is greater than the investment in the entire mill of the old days. In the building and operating of the machinery, the tendency is to leave the specialized task to the specialist. As a consequence, we find that whereas in former years the paper machine builders built the machine as a whole, we now find the different functions of the paper machine get the benefit of specialized study by others.

Modern requirements have made specialization an absolute necessity to properly supplied equipment used in the various phases of modern manufacture—paper, of course, included. The paper machine builder no longer attempts to build everything from the boiler room clear through the finishing room, with everything in the mill taken in on the way. That day is past. Specialists in power generation found their way into the boiler room. Electrical experts substituted modern for antiquated power appliances. Specialists developed efficient methods of treating and handling stock. On the paper machine the wet end had the benefit of specialized study on the part of screen builders, Voith and Van Decar. Millspaugh contributed and built the suction roll. Farrell specialized in calenders. Pope made decided advances in the reeling operation. We volunteered to take the curse off the winding operation.

The winding operation is no mean problem. Manufacturers and converters of paper are up against customers who want and demand faultlessly wound rolls of paper and paper board. This problem demands serious consideration to a greater extent than has ever been devoted to it in the past. Furnishing such rolls means the retaining of desirable trade and the satisfying of new prospects.

In the face of this fact it is amazing that so many paper manufacturers and converters seek to get along with incompetent slitting and roll-winding machines, many of which are shot, some half shot, built on designs used before speed and quality of roll winding were matters of any importance.

Many winders in operation today were designed before the processes of slitting and roll-winding were important factors in mill operation. The bulk of paper went out in sheets and as for the roll, any kind of roll could get by. The same designs are adhered to today in all the basic features except in winders of the Camachine type.

In these old time winders the web is slit 'way back in the rear of the drums, the wrong kind of slitter in the wrong location. The web in these old winders is still dragged over the bent bar or "bow spreader", as it is called, to separate the sheets on the way to the drums. The tilt roll requires constant vigilance and adjustment by the operator to keep one or another of the sheets from running slack in their journey from the slitters to the drums. The wind shaft still lies in the valley between the drums—a brutally heavy affair—in order to start the winding by contact with the drums. Loose starts and false starts, one drum necessarily driven faster than the other at the start of the winding and necessarily lowered down as the rolls build up in diameter.

Can a Cocoanut Think?

In these basic points there has been no advance in 30 years except to doll up this old and incorrect design with roller bearings and special gadgets of one sort or another, but a wig won't make a cocoanut think like a real human head.

We talk here of winders because we know them best, but it seems to us that in the rush and hullabaloo of building paper machines all the way from the drafting room to the shipping room, there is no time to bother with highly specialized study. The paper machine builders should concentrate on the paper making mechanism, the forming and drying of the sheet, leaving a Millspaugh or a Van DeCar or a Pope or a Rogers or a Staege to contribute their quota of help in the fields in which they are expert. In that way the paper manufacturing industry as a whole will benefit by this united team work concentrated on the perfection of paper making equipment.

This team work on the mechanical side, which is all that has been stressed here, supplemented by admirable achievements on the technical side—in paper chemistry, for instance, and mill executive methods—will rapidly carry the industry to a point way beyond that which it has reached thus far, either on this or the other side of the Atlantic.

A New Method for Making Rosin Size

By F. M. WILLIAMS, President
Williams Apparatus Company, Watertown, N. Y.

FOR 124 years, or ever since Illig first discovered that by boiling rosin and alkali together and afterwards precipitating it upon the fibers, he could make paper harder and more water resistant, comparatively little scientific attention has been devoted to improving the method of making size.

Rosin is boiled with alkali today, the same as it was then. Most of the scientific research devoted to the subject has been spent upon how rosin size attaches itself to the fiber, the exact composition of the precipitated rosin, whether it is free rosin which does the sizing or a resinate of aluminum or both, and a study of the best practical balance between rosin size and alum, control of acidity, measurement of ionization, etc.

Paper mills formerly made their own size by the boiling process, but it was a messy, dirty job and the product obtained often showed great variation in uniformity.

So in recent years, many mills have been converted away from making their own size and have submitted to the additional costs of buying prepared size.

With these preliminaries disposed the succeeding paragraphs will be devoted to a discussion of observations leading up to the development of the Williams Process of size making.

Greater Surface Contact

Obviously, the reason why it takes from five to 15 hours to effect thoro chemical combination between rosin and alkali by the old boiling method, is because of the limited surface contact which a large mass of molten rosin presents to the reacting alkali. Clearly, one remedy at least for this difficulty, lay in increasing the surface area of the rosin.

Mathematically, a one inch cube of rosin has six square inches of surface area. The same amount of rosin in one-half inch cubes, has 12 square inches or, in other words, dividing the length or width of one side of a cube by two, multiplies the surface area by two. Therefore, if our one inch cube of rosin is reduced to particles of one ten-thousandth of an inch, the surface area presented to the action of the alkali will be multiplied ten thousand times.

Other elements enter into the processes besides mere subdivision, such as overcoming the naturally high surface tension of the rosin, the use of protective colloids, etc. Without entering into further details, it was found that chemical reaction readily took place between rosin and the alkali without the addition of any steam or heat and without undue waste of time.

Further, it is to be noted that the avoidance of heat gives a size of a much lighter color from the same grade of rosin, as it is a well known fact that boiling rosin with alkali always darkens the product.

It was also found that by the combination of fine sub-division and the proper gauging of the raw materials, rosin, alkali, etc. in a closed container, such as a pebble mill, a rod mill or a ball mill, an absolutely uniform size could be obtained.

By changing the relative proportion of alkali and rosin, any desired amount of the rosin may be left in excess, giving a so-called high free rosin size, and as this detail is under absolute control, a low free rosin or neutral size can be made equally well at will. My contention is that, by the Williams Process the paper manufacturer can readily duplicate the type of size which his experience has proven best for his particular requirements.

Other well known sizing substances may be incorporated in the size during the making, giving special products to meet particular requirements, such as unusual water resistance, improved folding qualities, foam prevention, etc.

The installation costs for necessary new equipment are nominal, and experience has shown that satisfactory use of this size in actual mill operation covering something over a year, has more than justified the hopes and claims made for the process.

Grays Harbor Pulp Shows Loss

Grays Harbor Pulp & Paper Company reports a profit from operations, before interest and depreciation, for the fiscal year ended April 30, 1931, of $437,402. Interest paid amounted to $244,735. After all charges and write-offs the net result for the year was a loss of $205,165.

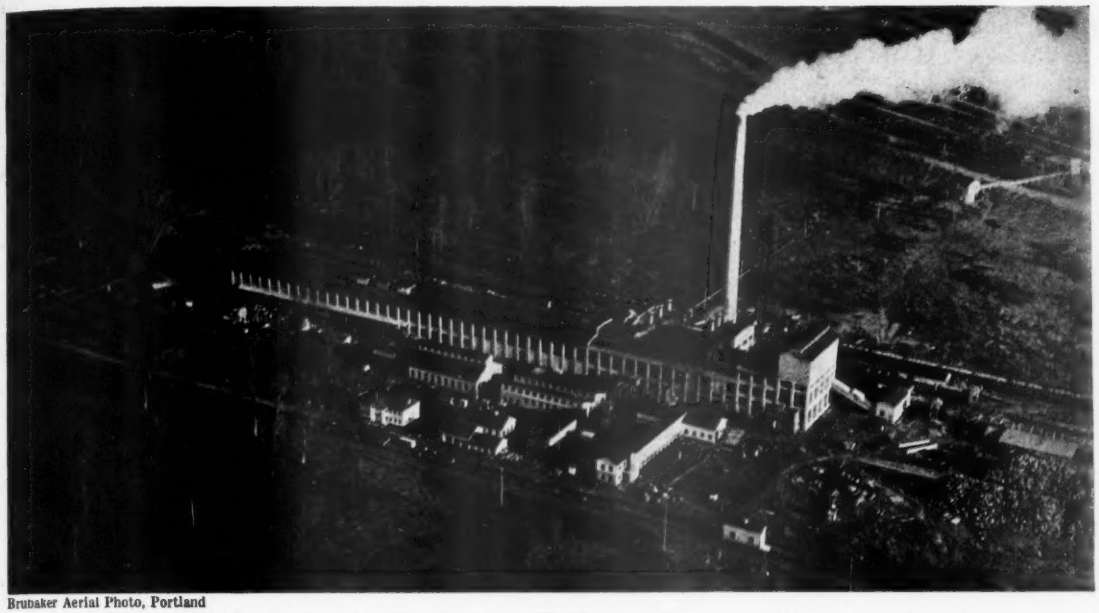
The balance sheet, as of April 30, 1931, shows current assets of $1,299,793, of which $411,095 were cash items. Current liabilities were $564,518. The original $3,750,000 of first mortgage indebtedness has been reduced to $3,593,000.

Operations since January 1 have been on a considerably more favorable basis than for the latter part of 1930. The plant is now operating at about 80% of capacity, which rate is required to meet current consumption.

The company operates a 175-ton bleached sulphite pulp mill and a 50-ton bond paper mill at Hoquiam, Washington.

Houk Heads Oregon Products Committee

George W. Houk, executive vice-president of the Hawley Pulp & Paper Company, Oregon City, has been chosen as secretary of the newly-organized Oregon products committee. The committee was formed July 22 at Salem, Oregon, at the suggestion of Governor Meier, who is himself a member, for the purpose of boosting the consumption of Oregon grown and manufactured products. It is planned to adopt a distinctive label to be used on all Oregon products and to institute a campaign to educate the manufacturer, distributor, retailer and consumer as to the benefits to be employed by using Oregon products.



Brubaker Aerial Photo, Portland

The Longview Fibre Company's mill at Longview, Washington. Recent extensions are not shown here.

Longview Fibre Adds Experimental Vacuum Dryers

The Longview Fibre Company has purchased a 90-inch experimental fourdrinier machine equipped with a Minton Vacuum Dryer section.

The only building construction involved is a new finishing room, as the new experimental machine will go into the present machine room in the space now used as a finishing room. This installation will therefore result in having a 150-inch cylinder machine, a 172-inch M. G. paper machine and a 90-inch fourdrinier machine in the present large machine room. No additions to the pulp mill are contemplated.

The Longview Fibre Company has plans for production of special grades of paper and has purchased the small experimental machine so as to develop these plans by using the smallest machine which can be expected to give full commercial results.

It is expected that the machine will be ready to operate about the end of the year, but no estimates of employment or production can be made because of the experimental character of the machine and the installation.

The Longview Fibre Company completed and began production in its 120-ton kraft pulp and paper mill in the fall of 1927. Its location at Longview, Washington, is strategical from the standpoint of wood supply and shipping. In its four years of activity the company has gradually and consistently widened the sphere of its activities. R. S. Wertheimer is resident manager.

Crown To Move L. A. Converting Unit

Construction of a $300,000 converting plant for the Crown Willamette Paper Company, a subsidiary of the Crown Zellerbach Corporation, was started late last month in the Hostetter industrial district, Los Angeles, following an announcement of William R. McHaffie, resident manager of the company.

The plans, prepared by the Austin Company of California, which also will have charge of construction, call for a steel frame structure 193 by 315 feet at the northwest corner of East Twelfth Street and Evergreen Avenue.

The structure is scheduled to be ready for occupancy in the early Fall, according to officials. It will be of car floor height for the most convenient service by a private Union Pacific spur track. The building will house the three departments, providing for raw stock storage, the operating department, and the storing of the finished merchandise.

A two story section will be occupied by the Southern California offices of the Crown Willamette Paper Company and the offices of the National Paper Products Sales Company, also a subsidiary of the Crown Zellerbach Corporation, which is to direct the marketing of paper towels and toilet paper.

The converting units will occupy a one story section comprising 65,000 square feet. The operations room will be of saw tooth construction, assuring good light and ventilation. Large folding doors and shipping platforms will facilitate freight shipments.

Both street frontages will be of buff colored face brick, while a common brick of the same color will be used in other walls to maintain the light color scheme.

The plant will be arranged on the straight line system, providing for a continuous movement of the paper from the raw storage in one general direction to completion.

Many Southern California newspapers are supplied with newsprint by this company, which also supplies a large percentage of fruit wraps to the California Fruit Growers' Exchange, and the independent packing trade. The present plant is at 839 North Spring.

Mr. McHaffie pointed out that paper is susceptible to moisture changes, but in order to maintain the paper in perfect condition, the departments for storage of raw stock and the finished merchandise are being equipped with the latest devices for maintaining uniform temperature and humidity. In the manufacture of citrus wraps, the proper moisture is left in the fibres and the paper is oiled to make it pliable, soft and transparent. These qualities in the wrappers are maintained irrespective of climatic conditions through the devices that are being installed. Plans have been made so that there will be a continuous movement of the paper from raw storage through the converting plant in one general direction so as to insure economic handling.

Coast Pulpwod at $5.50 a Cord

Pulpwood prices in the Pacific Northwest are getting lower than ever in the current period. The poor prices for farm produce and the rather aggravated unemployment situation in the lumber and kindred industries has done much to encourage pulpwood cutting on the part of the little fellow.

It is reliably reported that some mills in Western Washington are now getting peeled Western Hemlock cordwood laid down in the mill yard for $5.50 a cord. Such a price forces serious consideration of the cordwood supply in competition with wood obtained as logs or as sawmill waste.

One company is said to be quoting peeled and barked Western Hemlock mill waste—which is practically all flat slabs—at $6.50 a cord. The argument for the greater price in this instance is that a greater chip volume is obtained from a cord of slabwood than from a cord of roundwood. Also, the slabs are nearly all sapwood.

Fir-Tex versus Celotex

Three decisions just handed down by the United States Court of Customs and Patent Appeals seem thoroughly to establish the right of The Celotex Company to the exclusive use of its name in the building field.

In the appeal from the decision of the Committee of Patents giving "Opaltex" the right of registration, the Celotex Company secured reversal, Judge Hatfield ruling that Opaltex was clearly confusing to the public and should be denied registration.

In a similar appeal Judge Bland ruled against "Flametex" on the same grounds, calling attention to the importance, as a matter of public policy, of protecting the investment of Celotex, the originator, in its investment in advertising and promotion.

In the case of "Firtex," Judge Graham emphasized the need of enforcing that portion of the trademark statutes forbidding the appropriation of trade-marks by deliberate resemblance, protecting the good will and reputation of established trade-marks.

The Fir-Tex Insulating Board Company has a $2,000,000 plant for the manufacture of "Fir-Tex" insulating board at St. Helens, Oregon.

Australia Gives Canadian News Tariff Preference

British Columbia newsprint has been given additional tariff preference in the Australian market by the action of the commonwealth government in removing the special duty recently imposed. This is expected to give British Columbia mills a strong advantage in competing for Australian newsprint business with the Scandinavian countries, their principal competitors.

In the original newsprint duties the Canadian product entered Australia on the free list, while newsprint from non-British countries were taxed $15 a ton. Subsequently a change was made under which the duty on Canadian newsprint was raised to $5 a ton and that from other countries to $20. The announcement is now made that the Australian government proposes to eliminate this $5 increase, although leaving the $20 a ton duty on newsprint from other countries.

Last year Canada shipped newsprint and other paper products to Australia to the value of more than $5,000,000. This business has more than tripled since 1925. When Australia brought down a tariff at that time giving avdantage to Canadian newsprint Powell River Company doubled its capacity and since then has further augmented its facilities to meet the growing demand from Australia. Pacific Mills, Ltd., at Ocean Falls, and B. C. Pulp & Paper Company and Westminster Paper Mills, have also shared in this growing business.

Last year a total of 52,006 tons of newsprint was shipped from British Columbia to Australia, this having increased from a little over 12,000 tons in 1925. Wrapping paper in the same period showed a decrease from 2,700 tons in 1925 to 1,100 tons in 1930. Most of this loss has been a gain for Sweden.

British Columbia operators see some possibility of a boomerang in the new agreement, in that retaliatory measures may be taken on other products. The new line-up places Canadian and British mills on a par. Scandinavian news print is under a handicap, but imports from that region were negligible anyway. Further, heavy discounts in Australian exchange tend to reduce the advantage.

Pulp Prices At Bottom

O. M. Allison, Portland attorney who was recently elected a director of the Spaulding Pulp & Paper Company, is of the opinion that the pulp market has reached bottom. He feels that this opinion is well confirmed by the fact that the firm has had inquiries for pulp at the present price for as far into the future as two and a half years. This desire of buyers to tie up on a long-time contract at existing prices, he takes as a fairly sure indication that the upward turn is in sight.

The 75-ton Spaulding mill at Newberg started the new year operating at one-third capacity, but with reorganization of the production end and some strong sales efforts it was soon operating full time. Mr. Allison feels confident that it will continue at full capacity until the end of 1931.

Because of the shutting down of lumber mills in the vicinity, the Spaulding mill has experienced some difficulty in getting an adequate supply of hog fuel.

Roofing Mill Proposed for Seattle

Plans for the construction of a roofing paper mill in the Ballard district of Seattle are progressing, the principals report, but financing arrangements have not been completed and no active building is proposed until that has been done. The company has a deep water site on an arm of Lake Union close to the upper side of the locks which give ocean going traffic access to the fresh water Lakes Union and Washington.

Roy E. Stanley is president of the company. I. Schuman, vice president of the Pacific Iron & Metal Company, Seattle, is vice president of the roofing mill company.

The Paper Industry In Japan
May—1931

	Production Pounds	Sales Pounds
Printing Paper (Superior Quality)	13,330,642	11,591,928
Printing Paper	11,636,478	10,705,017
Writing Paper	3,069,853	2,581,671
Simili Paper	11,627,823	8,489,474
Art Paper	1,134,740	821,132
News Printing Paper	42,367,239	46,156,639
Sulphite Paper	4,446,414	4,526,950
Colored Paper	1,190,896	1,395,276
Wrapping Paper	10,118,017	11,773,401
Chinese Paper	1,533,264	792,597
Board Paper	6,587,763	6,344,387
Sundries	6,318,676	6,385,049
Total	113,361,805	111,563,521

E·D·I·T·O·R·I·A·L

¶ Alarmed at the greed-inspired dissipation of its natural oil resources, the more sensible elements of California's oil industry fostered the Sharkey Act, which has now become law with affixation of the governor's signature.

¶ The Sharkey Act is a conservation measure which restricts the production of crude oil to the demand for it. If the law operates as it is hoped it will operate, over-production, with its disastrous attendant evils such as have prevailed, will not occur.

¶ The Sharkey Act not only prohibits waste, but arrives at a concrete and apparently workable definition of what "waste" really is. The definition is wide, and includes a multitude of practices now prevalent which do prevent beneficial use of the raw resource.

¶ Voluntary curtailment, altho it has improved the situation in California, has failed of full fruit because of the failure of some greedy elements to cooperate, and the parasitic seizure of an improved situation by the shyster. The Sharkey Act puts teeth in the conservation intent by making waste an offense, and puts the regulation of affairs in the hands of a commission, the head of which is the State Oil and Gas Supervisor.

¶ The real strength of the Sharkey Act will, of course, lie in great measure in the readiness of other oil producing states to fall in line with comparable conservation practices. For that there is considerable hope with California's sensible leadership.

¶ In this day when overproduction is shouted across every desk, there is good moral food in the creation of the Sharkey Act for the paper industry to exercise its mental molars upon.

* * *

¶ The tendency of Pacific Coast pulp mills to work ever more closely with the pulp-consuming paper mills in the Eastern part of the continent is seen in the efforts made to study the paper mill needs and then direct the pulp making energies toward meeting these predetermined requirements.

¶ Some pulp mills are, for example, bracketing a customer's requirements within definite limits and then seeing to it that only pulp within those brackets is forwarded. On the receiving end this practice insures a high degree of uniformity in the pulp and naturally develops a cordial feeling between paper mill and pulp mill, not to say the maintenance of high uniform quality in paper making.

¶ The necessity of intelligent cooperation between technically trained men in both the supplying and the supplied mills is of course apparent. The necessity for bracketing in order to supply pulp of a consistent quality to a given paper mill is also proof that exact methods of technical control are not yet with us.

* * *

¶ Sometimes a board of directors which has a greater familiarity with agriculture, prune-picking, hardware, or banking, than with the ramifications of paper manufacturing and merchandising, can hang like a gargantuan millstone around a mill management's neck. There are, however, ways and means of demonstrating the necessity of expenditure for the purpose of effecting operating economies.

¶ For example, there was the mill manager who, in desperate need of a save-all to recover a serious fibre loss in his pulp mill, conceived the idea of piping the white water out the window directly across the street from the office of one stubborn director.

¶ The pile of good pulp which accumulated under that window after a few days of operation was just exactly the kind of grammar school illustration that mill manager needed to convince the director that a save-all was an investment, not an expenditure.

* * *

¶ What's ahead for news print? Are the 75-25 and 80-20 ratios of groundwood and sulphite in today's news print due for a change with sulphite disappearing entirely. Experiments in an all-groundwood news print sheet have been made over the past four years and daily papers have been printed experimentally on a commercial basis.

* * *

¶ Agitation raised in the United States against dumping of chemical pulp in this country at disastrous prices has recently been reflected to across the pond.

¶ On this side it has been charged that foreign producers of pulp have been unloading their tonnage in the United States at prices below the cost of manufacture, or in other ways contrary to the interpretations of the Anti-Dumping laws. This action on the part of foreign pulp manufacturers was said to be a determined effort to hang on to customers.

¶ Recently the complaints of dumping come from another direction. It is charged that Pacific Coast producers of sulphite, determined either on retaliation or upon entering a wedge in the European markets, have landed pulp in European ports with no consideration for established prices.

¶ The Swedish Wood Pulp Journal comments as follows:

¶ "Complaints are heard of competition from the Pacific Coast mills, which seem to accept fantastically low prices just to gain a footing in the European markets. Under the influence of this competition, some small parcels have been sold at 10 Pounds 15 Shillings per 1,000 kilos (approximately $48.50 per ton of 2,000 lbs.) ci.i.f. North of France ports. The price seems to fluctuate between this bottom price and up to 13 pounds ($65), which is asked for certain brands."

* * *

¶ One dosen't have to be reminded these days of the spreading uses of transparent wrappers such as "cellophane". Cigarettes, prunes, haberdashery and what not are all getting dolled up in it.

¶ What's the other side of the picture? Is this new wrap displacing glassine? Rumbles in the affirmative are heard, as for example, the talk among some prominent glassine manufacturers to organize an advertising and educational advertising campaign singing the praises of their product. Such action is always a sign of territory being lost.

¶ Meanwhile the picture changes for the manufacturers of wood pulp. Increasing use of "cellophane" will mean a greater demand for high grade pulps. At least one Pacific Coast pulp mill is now manufacturing a pulp which is going into "cellophane" and rayon manufacture.

¶ Further than that, it is becoming more of a known fact that Western Hemlock, a pulptimber species peculiar to the Pacific Coast, is eminently suited for making the high grade rayon and "cellophane" pulps.

UP UP UP ---

Pulpwood Consumption in Pacific Northwest Shows Consistent Gains in 1930 Census

CONTINUED growth of the pulp and paper industry in the Pacific Coast states and further emphasis of the shift of the industry to westward is evidenced in the Bureau of Census data released in July, showing pulpwood consumption and woodpulp production; production of paper and paper boards; and paper making equipment in use.

The state of Washington, which has demonstrated such great pulp activity in the past half dozen years leaped into third place among the pulpwood consuming states in 1930, closely pressing Maine and Wisconsin, the two states which have long led the nation. California and Oregon, statistics for which are combined, also showed an increase.

The industry in New York state, formerly third in rank, fell off sharply in 1930 and now stands a poor fourth. This may be taken to be some evidence that dwindling wood supply and rising costs of wood are gradually forcing pulp mills in that state out of competition. It is particularly significant that the Western states registered increases in pulpwood consumption in 1930, when statistics all over the nation otherwise, with one exception, showed declines. The exception is Virginia, which held even.

There is significance in the steadily rising importance of the Pacific Northwest states in pulpwood consumption. Washington has now moved into third place among the states and is a strong contender for first place. The fact that the West Coast showed consistent gains in 1930 when other regions showed declines is particularly worth noting.

In the classification of wood used, by species, spruce absorbed the lion's share of the decline. Use of most other woods declined also, altho increases were registered in the use of balsam fir and jack pine—bastards of yesterday, welcome today in the pulp mill. Further significant gains in the use of sawmill waste is also noted, practically all of which is accounted for on the Pacific Coast.

The total pulp produced in 1930 compares very well with 1929 in view of the calamity howling so prevalent during the year. Decreases were registered in mechanical, sulphite and soda pulps, but sulphate production increased. Page the Southern kraft mills!

Paper production fell off by slightly more than one million tons in 1930, or approximately 9%. Decreases were fairly well distributed over the grades, but increases were registered in sulphite bonds, sulphite and manila wrappings, folding boxboards, and set-up boxboards. However, these data are not strictly comparable as the 1929 census did not call for the identical data asked for in the 1930 census.

The nation's production was delivered by 1665 paper machines, fourdriniers numbering 941, and cylinders numbering 724. And one can hazard the statement with reasonable accuracy that this represents the total number of machines ever installed in the United States mills. There are no data on how many are obsolete. And none are ever discarded! The formal news release of the Department of Commerce, Bureau of Census, Census of Forest Products—1930, is presented below:

The Bureau of the Census announces that, according to data collected in 1931 in cooperation with the Forest Service, Department of Agriculture, the total consumption of pulpwood in 1930 amounted to 7,155,588 cords, reported by 197 mills. This figure represents a decrease of 6.4% as compared with the consumption in 1929—7,645,011 cords, reported by 208 mills. The total production of wod pulp in 1930 was 4,610,408 tons, a decrease of 5.2% as compared with 4,862,885 tons in 1929.

The production of paper and paper boards was approximately 9% less in 1930 than in 1929, the output being 10,079,656 tons, reported by 687 mills, and 11,090,579 tons, reported by 684 mills, respectively, for those years.

Detailed statistics are presented in Tables 1 to 5. The figures for 1930 are preliminary and subject to correction.

TABLE 1.—PULPWOOD CONSUMPTION, and WOODPULP PRODUCTION, BY STATES: 1930 and 1929

This table presents statistics for each state for which separate figures can be given for 1930 without disclosing data for individual establishments, and for the remaining states in groups.

State—	Pulpwood Consumed (cords)		Wood Pulp Produced (tons, 2,000 lbs.)	
	1930	1929	1930	1929
United States	[1]7,155,588	7,645,011	4,610,408	4,862,885
Individual States				
Maine	1,203,377	1,311,577	905,088	981,433
Wisconsin	1,128,853	1,233,962	681,111	733,617
Washington	1,000,001	956,132	566,137	523,948
New York	763,451	826,312	596,219	662,988
Louisiana	422,710	459,553	243,915	246,590
Virginia	378,421	375,179	216,365	206,050
Pennsylvania	352,775	397,680	188,943	213,083
Michigan	279,986	313,477	193,418	178,015
New Hampshire	242,756	376,014	138,332	212,774
Minnesota	230,471	266,320	182,456	189,664
Tennessee	74,839	([2])	53,174	([3])
Massachusetts	43,400	45,100	29,378	29,492
Vermont	24,224	25,486	25,047	26,307
Groups of States				
Ala., Ark., Miss., N. C., S. C. and Tex.	479,300	[2]486,927	245,210	[2]276,327
Calif. and Oregon	351,053	340,745	248,592	256,546
Del., D. C., Md., and N. J.[4]	120,307	138,567	67,028	79,578
Ohio and W. Va.	59,664	89,980	29,995	46,473

[1]Includes data for a small quantity of spent licorice root of no market value.
[2]Not shown separately in order to avoid disclosing data for individual establishments.
[3]Includes data for Tennessee.
[4]For 1929, Delaware, District of Columbia, and Maryland only.

TABLE 2.—PULPWOOD—CONSUMPTION, BY KIND OF WOOD AND QUANTITY: 1930 and 1929

Kind—	Quantity (cords) 1930	1929
Total	[1]7,155,588	7,645,011
Spruce:		
Domestic	1,842,251	2,074,267
Imported	888,255	1,029,913
Hemlock[2]	1,185,711	1,324,549
Yellow pine, Southern	997,195	1,036,272
Poplar:		
Domestic	301,897	329,466
Imported	159,092	157,829
Balsam fir:		
Domestic	358,461	317,552
Imported	48,935	45,412
Jack pine	248,072	209,225
Chestnut, domestic	156,299	([3])
Yellow poplar, domestic	97,795	129,697
Beech, birch, and maple	68,848	76,950
White fir, domestic	62,739	111,054
Gum, domestic	41,825	39,685
Tamarack (larch)	40,054	51,835
Other wood[4]	64,057	150,020
Slabs and mill waste	594,102	561,285

[1]See footnote 1, Table 1.
[2]Includes small quantities of imported hemlock.
[3]Not shown separately in order to avoid disclosing operations of individual establishments.
[4]Includes domestic and imported basswood and cottonwood, and domestic Douglas fir, white pine, and willow.

TABLE 3.—WOOD PULP—PRODUCTION, BY QUANTITY AND PROCESS, FOR THE UNITED STATES 1930 and 1929

Process and Condition:	Quantity (Tons of 2,000 pounds) 1930	1929
Total	4,610,408	4,862,885
Mechanical, total	1,558,821	1,637,653
Not steamed	1,413,420	1,474,415
Steamed	145,401	163,238
Sulphite, total	1,515,795	1,681,511
Unbleached	764,629	841,558
Bleached	751,166	839,953
Sulphate, total	952,282	918,084
Unbleached	882,794	([1])
Bleached	69,488	([1])
Soda, total	504,229	520,729
Unbleached	50,939	([1])
Bleached	453,290	([1])
Semichemical	30,213	[2]40,481
Screenings, total	49,068	64,427
Mechanical	6,611	11,459
Chemical	42,457	52,968

[1]Not shown separately in order to avoid disclosing the production of individual establishments.
[2]Includes data for a small quantity of wood pulp not covered by the items specified.

TABLE 4.—PAPER AND PAPER BOARDS—PRODUCTION BY CLASS, KIND, AND QUANTITY, FOR THE UNITED STATES: 1930 and 1929

The schedule used for 1330 did not call for data in as much detail as did that used for 1929, and consequently some of the figures in this table may not be strictly comparable as between the two years.

Kind—	Quantity (Tons, 2,000 pounds) 1930	1929
Total	10,079,656	11,090,579
Newsprint, standard	1,232,611	1,409,169
Hanging paper	99,682	101,002
Catalogue	114,588	111,771
Book paper, uncoated	1,341,362	1,497,912
Cover paper	43,177	28,072
Writing paper, total	579,508	587,383
Rag content	103,226	118,619
Sulphite bond	344,469	264,402
Other chemical wood	131,813	204,362
Wrapping paper, total	1,538,519	1,605,783
Sulphite, manilas, etc.	358,068	270,670
Kraft	822,334	[1]846,468
Other	358,117	488,645
Boards, total	4,051,512	4,451,187
Container boards	1,908,385	2,255,537
Folding boxboards	1,005,993	991,285
Set-up boxboards	655,689	599,665
Building boards	126,464	131,969
Binders' board	47,669	64,165
Cardboard	74,461	47,233
Leather board	14,328	24,228
Press board	5,658	11,901
Other	212,865	325,204
Tissue paper, total	359,798	370,468
Toilet	159,123	142,725
Towel	53,621	52,283
Other	147,054	175,460
Absorbent papers	79,818	78,694
Building papers	453,526	659,178
Other papers	185,555	189,960

[1]Data for 134,234 tons of sulphate wrapping paper "for bags" included in order to make the figures comparable with those for 1930.

TABLE 5.—PAPER MACHINES, BY TYPE, NUMBER, and CAPACITY, BY KINDS OF PAPER MADE: 1930

(The statistics presented in this table and in the corresponding table in the report for 1929 are not strictly comparable with the corresponding figures in the reports for 1927 and 1928, because for those years each machine was classified according to the principal product made on it, whereas for 1929 and 1930 the establishments were instructed to report as follows: "Where the same machine is used for producing more than one kind of paper, report the number opposite the item indicating the kind of paper normally produced, and divide the capacity according to the kinds of paper made on that machine".)

Kind—	Capacity per year or 310 days (tons, 2,000 pounds)	Fourdrinier No.	Fourdrinier Capacity per 24 hours (tons, 2,000 pounds)	Cylinder No.	Cylinder Capacity per 24 hours (tons, 2,000 pounds)
Total	13,630,390	941	22,273	724	21,696
Newsprint	1,712,130	121	5,523	.....	.....
Book paper	1,761,420	235	5,680	1	2
Cover paper	112,530	21	333	4	30
Writing paper	594,580	148	1,911	1	7
Wrapping paper	2,018,100	221	5,840	64	670
Boards	5,789,870	21	797	464	17,880
Tissue paper	440,820	109	990	87	432
Absorbent paper	118,420	35	349	17	33
Building papers	822,430	4	194	73	2,459
Other	260,090	26	656	13	183

DUTY ON PULP—Continued from page 24

lic utilities of all kinds are subsidized in effect by the legal establishment of rates based on their investment and their cost of doing business. Large bodies of workers are subsidized in turn by general acknowledgement that their established wages are a legitimate and fair part of the cost of doing business. How long such a system will endure and whether in the light of history it will be declared good or not, I am not prepared to say. One thing is certain. Under that system the nation has grown great. It seems to me poor policy and a rather shabby acknowledgement of the benefits that we have enjoyed and terribly inconsistent withal for us to oppose the continuation of that system in the case of one line of manufacture because of our hope for a small immediate profit.

An unique windowless paper mill, designed to place all lighting and ventilation under scientific control, was recently put into production by the Blandin Paper Company at Grand Rapids, Minnesota.

The windowless design is expected to contribute to the production of a uniform high quality product under constant light and temperature conditions and to measurably improve working conditions for mill employes. Briner waste heat economizers play an important part in reclaiming waste heat values and in warming mill air supplied particularly during the winter when temperatures frequently reach 40 degress below zero.

T-R-A-D-E - T-A-L-K

Devoted to the Paper Trade of the Western States

1931 OFFICERS
PACIFIC STATES PAPER TRADE ASSOCIATION

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C. H. Fricke, Taverner & Fricke, Los Angeles.
A. W. Towne, Blake, Moffitt & Towne, San Francisco.

Secretary-Treasurer
H. Arthur Dunn, San Francisco.

Committee Appointments

The following committeees have been appointed by President George I. Tompkins of the Pacific States Paper Trade Association to serve for the year 1930/1931:

Program for 1932 Convention: L. A. Colton, Chairman, Zellerbach Paper Co., San Francisco; C. A. Bell, Secretary, Portland; J. R. Coffman, Secretary, 307 S. Hill St., Los Angeles; W. S. Gilbert, Secretary, 915 Paulsen Bldg., Spokane; J. Y. C. Kellogg, Secretary, 828 Central Bldg., Seattle.

Cost of Deliveries: E. A. Breyman, Chairman, Zellerbach Paper Co., San Francisco. (Chairman will choose his own committeemen.)

Uniform Method of Merchandising: T. M. Denison, Chairman, Blake ,Moffitt & Towne, Los Angeles; E. A. Breyman, Zellerbach Paper Co., San Francisco; W. D. McWaters, Zellerbach Paper Co., Portland.

Simplification of Printing & Wrapping Papers: A. W. Towne, Chairman, Blake, Moffitt & Towne, San Francisco; C. H. Beckwith, Carter, Rice & Co., Corpn., San Francisco; Victor E. Hecht, Zellerbach Paper Co., Los Angeles; W. D. McWaters, Zellerbach Paper Co., Portland; A. B. Rogers, Spokane Paper & Stationery Co., Spokane; J. W. Thompson, Blake, Moffitt & Towne, Seattle.

Committees to Parallel Those of National Paper Trade Association

Trade Relations (Fine & Wrapping Papers): H. L. Zellerbach, Chairman, Zellerbach Paper Co., San Francisco; C. H. Beckwith, Carter, Rice & Co. Corpn., San Francisco; H. S. Bonestell, Bonestell & Co., San Francisco; E. A. Doran, Blake, Moffitt & Towne, San Francisco; T. A. O'Keefe, Pacific Coast Paper Co., San Francisco; W. B. Reynolds, General Paper Co., San Francisco.

Fine Paper Division

Postal: R. C. Ayres, Chairman, Zellerbach Paper Co., San Francisco; A. W. Towne, Blake, Moffitt & Towne, San Francisco.

Credit: G. I. Tompkins, Chairman, Sierra Paper Co., Los Angeles; C. H. Beckwith, Carter, Rice & Co., Corp., San Francisco; W. B. Maxwell, Blake, Moffitt & Towne, San Francisco; W. D. McWaters, Zellerbach Paper Co., Portland.

Trade Practice: M. R. Higgins, Chairman, Crown Zellerbach Corp., San Francisco; H. S. Bonestell, Bonestell & Co., San Francisco; E. A. Doran, Blake, Moffitt & Towne, San Francisco; T. A. O'Keefe, Pacific Coast Paper Co., San Francisco.

Wrapping Paper Division

Bag: O. W. Mielke, Chairman, Blake, Moffitt & Towne, Portland; B. G. Ewing, B. G. Ewing Paper Co., Spokane; Victor E. Hecht, Zellerbach Paper Co., Los Angeles; T. A. O'Keefe, Pacific Coast Paper Co., San Francisco.

Kraft: M. B. Olmsted, Chairman, Zellerbach Paper Co., San Francisco; A. B. Rogers, Spokane Paper & Stationery Co., Spokane; R. R. Whiteman, Blake, Moffitt & Towne, Los Angeles.

Gummed Tape: W. E. Taverner, Chairman, Taverner & Fricke, Los Angeles; Chas. Pritchard, Bonestell & Co., San Francisco; J. W. Thompson, Blake, Moffitt & Towne, Seattle.

Tissue: F. E. Jeffries, Chairman, Tacoma Paper & Staty. Co., Tacoma; M. B. Olmsted, Zellerbach Paper Co., San Francisco; W. E. Taverner, Taverner & Fricke, Los Angeles.

Twine: J. W. Thompson, Chairman, Blake, Moffitt & Towne, Seattle; Victor E. Hecht, Zellerbach Paper Co., Los Angeles; E. R. McQuaid, Pacific Coast Paper Co., San Francisco.

Survey: E. A. Breyman, Committee of One, Zellerbach Paper Co., San Francisco.

Los Angeles Envelope Firm Expands

With a 100% increase in floor space and an investment of $12,000 for new machinery, Capital Envelope Company, Ltd., has leased two floors of the Capital Building, 417 Wall street, Los Angeles. The firm was formerly located at 1803 East Seventh Street.

The company consumes from 600,000 to 800,000 lbs. of paper annually, much of the paper being furnished by the paper jobbing houses of Los Angeles to be converted into their own envelopes and about 50% purchased by the envelope company for their own work.

D. J. Crikelair, formerly with the Zellerbach Paper Company for about 12 years and well known in the paper trade of Southern California, is vice-president and sales director of the concern, having resigned from the Zellerbach firm about seven months ago.

"Business is increasing in a most satisfactory manner since our move," said George McNamara, president of the concern, "and we have good prospects of its continuing to increase."

N. L. Brinker, Los Angeles district manager, Hawley Pulp & Paper Company, recently spent his vacation in Santa Barbara.

Earl Van Pool, Pacific Coast head, Brown Company, Portland, Maine, visited his friends in Los Angeles recently.

Ingram In Los Angeles Adds Lines

Ingram Paper Company, 1507 Rio Vista street, Los Angeles, have completely reorganized their fine paper department. R. W. Geils, who was formerly in the paper business for himself in New York City, and who has had 16 years' experience in the trade, has been appointed sales manager of Ingram's fine paper division.

The Ingram Paper Company has taken on the complete line of Hollingsworth & Whitney basic bond; a complete stock of book paper, coated and uncoated; the Chemical Paper Manufacturing Company line of Bantam Manifold, and Myriad Onion skin; and Knowlton Brothers Indian Head cover.

The company is eight years old and is headed by Donald Ingram. Heretofore it has handled coarse paper exclusively.

"Business is coming along very nicely," said Mr. Geils, "and we feel sure that the new department will be a big success."

Redouble Instead Of Reduce Effort

Two salesmen have been added to the staff of the Scott-Hosfeldt Company of Portland, A. D. Hosfeldt reports, coincident with the reduction of administration expenses and reorganization of the sales territory. "The business is there if you go after it," Hosfeldt says. "We figure that at a time like this efforts should be redoubled rather than reduced."

The firm, while handling some of the volume business, is expending its greatest efforts on the profitable specialties and as a result its inventory-taking at the turn of the year disclosed the fact that, while January and February showed a net loss, the next four months produced a profit.

New Home For Barber-Ellis, B. C.

Contract for construction of the new four-story reinforced concrete building in Vancouver, B. C., for Barber-Ellis, Ltd., has been awarded to George Snider Construction Company. The completed building will cost approximately $60,000 and will be ready for occupancy by November 14. The dimensions will be 50 by 120 feet, with a frontage at the rear on railroad tracks.

Concrete stairways will be located at both front and back and a freight elevator will serve all floors. The office quarters, which are to be on the second floor, will be approached from the Homer Street entrance. Sample rooms will also be on the second floor. Steel sash is to be used throughout.

Henry Clark, vice-president and one of the organizers of the recently formed San Diego Paper House, has resigned from the company, according to a recent announcement. Mr. Clark represented the Zellerbach Paper Company in that city for about 20 years, before going with the San Diego Paper House.

* * *

E. B. Erskine, manager of the Denver branch of the Butler Paper Company returned this week from an extensive trip in the southwestern part of the territory, mostly in the state of New Mexico. He was gone for three weeks.

Mr. Erskine declares that conditions at the present time in that part of the country appear to be rather slow, with the belated effects of the general depression being felt most strongly at this time.

* * *

D. L. Maxwell, San Francisco, The Tissue Co., visited in Portland and Camas in July and toured eastern Oregon with Clyde Sayles of the Portland office of the Zellerbach Paper Co.

Smith-Lee's New Branch Home at Los Angeles

New Bottle Cap Plant in Los Angeles

Smith-Lee Bottle Cap Company, with main office and factory at Oneida, New York, have recently established their first direct factory branch at 2820 East Twelfth street, Los Angeles. The company is said to be the oldest firm in the world manufacturing paper milk bottle caps.

Hurlburt W. Smith is president of the concern, and S. M. Chaplin, general manager. While the Los Angeles plant is the only direct factory branch of the concern, other plants all over the world are making paper milk bottle caps with Smith-Lee machines under a ropalty plan.

Material for the caps is forty point manila, fifty percent sulphite board, supplied at the present time by the company's own paper mill at Oneida. A little later, it is stated the Los Angeles plant will be in the market for Pacific Coast board. A couple of tons of board are used per day.

Seven machines developed and patented by the Smith-Lee Company are installed at the Los Angeles plant. They have a capacity of 660 caps per minute or 300,000 caps one or two colors in nine hours with one operator. The cap the company manufactures is known as the "Protection Pull Cap" and is patented. At the present time the company employs ten men, all of whom were hired in Los Angeles. The superintendent, L. H. Perkins, however, came from the Oneida plant of the firm to direct operations at the Los Angeles plant.

In the near future the company plans to make its own ink rolls at the Los Angeles plant and also install their own electrotyping department.

Recent visitors in the paper industry in Denver who have made calls at the Butler headquarters include Warren R. Cobean of the National Paper and Type Company of Monterey, Mexico. Mr. Cobean, who is a brother of G. G. Cobean, connected with the executive department of the Butler Paper Corporation, is at present spending his vacation in Colorado with his family.

Another Denver visitor who has been calling on the various jobbers in this part of the country is Leon B. Steenback of the Cromwell Paper Company of Chicago.

* * *

Sollie Freidenberg, well-known banqueteer of the Zellerbach Paper Company, San Francisco, was missing from his usual haunts for a few weeks in July and when he got back on the job he was shy his voice, illness having taken temporary toll of his vocal organs.

* * *

Charles G. Sparrowe, San Francisco, representative of the Pacific Coast Paper Mills, was a Los Angeles visitor in July and reported he thought business was picking up in the southern territory. Charley reported, too, that the heat was picking up and he returned north before the excessive temperatures of the latter end of the month.

IF YOU ARE SEEKING WAYS TO REDUCE OPERATING COSTS

you'll find practical ideas in these bulletins

Plant and production executives who have previously read the various Ross booklets and bulletins will find it well worth while to more carefully consider their contents again at this time, when lower operating and maintenance costs have become imperative. Here are proven, practical ways in which needed economies can yet be secured — in the various departments — chiefly by the elimination of waste.

Ross booklets and bulletins help you determine where waste and inefficiency can be eliminated to secure needed savings. Copies gladly sent on request.

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New Types
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New Machines

EQUIPMENT

Manufacturers of, and dealers in, equipment used by pulp and paper mills, board manufacturers, converting plants, paper merchants, or any other branch of the industry may make their announcements in this department.

New Dealers
New Branches
Appointments

Ray Smythe In Business for Self

After 14 years with the Willamette Iron & Steel Works of Portland, Ray Smythe has resigned as general manager to establish a machinery brokerage business for himself.

Mr. Smythe has an unusually wide acquaintance in the pulp and paper and public utility fields and has in his years of experience acquired an extensive knowledge of manufacturing and sales. It is Mr. Smythe's intention to place his experience at the service of both purchaser and purveyor of equipment in the capacity of a broker.

RAY SMYTHE

of Portland Establishes Equipmen Brokerage Business.

"Many times purchasers do not have all the facts as to the best equipment and the ability of certain shops to manufacture the desired items economically," Mr. Smythe points out. "My endeavor will be to give practical assistance to buyers rather than act simply as an agent." He will act as representative for several lines of equipment.

Mr. Smythe has been active in professional affairs. He is past chairman of the American Welding Society, Portland Section, and one of the original founders of the organization. He is president of the United Metal Trades Association of the Northwest, Oregon District; chairman of the Pacific Section TAPPI committee on Equipment and Design; member of the board of directors of the National Safety Council, Portland.

Albany Felt Expert To Visit Coast

John C. Standish, general superintendent of the Albany Felt Company, Albany, New York, is scheduled to arrive on the Pacific Coast about the middle of August to spend several weeks visiting the pulp and paper mills of the region. He will be accompanied by Mr. Harry Stilwell, Pacific Coast sales representative of the Albany company. Mr. Standish will make a general study of Pacific Coast mill operating conditions with the idea of further improving the service of the Albany company in felt making for the industry.

Jenssen Will Represent Brobeck Cooking System

Altho the process has been on the market only a few months the Scandinavian pulp mills have taken to the Brobeck Cooking System for sulphite mills like a duck to water. That is the principal news brought back by A. H. Lundberg, Pacific Coast representative of the G. D. Jenssen Company, Seattle, upon return from a three months trip to Norway, Sweden and Finland.

The G. D. Jenssen Company has concluded arrangements whereby it will represent the Brobeck system in America. The Pacific Coast has the benefit of the most direct contact with the Scandinavian installations inasmuch as Mr. Lundberg was sent abroad for the specific purpose of studying the Brobeck system installations in that well known pulp producing region.

Fundamentally, the Brobeck Cooking System is a method of applying positive circulation and external heating in cooking sulphite pulp.

Notice Of Infringement

Notice of infringement of Seaborne marking roll patent has been served on Nekoosa-Edwards Paper Company, Port Edwards, Wisconsin, by the American Lakes Paper Company, Chicago, Illinois. The latter company is the owner of the Seaborne patent, which provides means to mark designs in paper.

Selden Opens Own Tacoma Office

Stanley J. Selden, industrial engineer, specializing in pulp and paper mills, is now offering consulting service under his own name at his office at 121 Perkins Building, Tacoma, Washington. Mr. Selden has been associated with Mr. L. A. DeGuere for a number of years and has actively been engaged in new and reconstruction work in the industry in the Wisconsin and Pacific Coast territories.

Mr. DeGuere has discontinued his Pacific Coast office and has returned to his former location at Wisconsin Rapids, Wisconsin, but Mr. Selden will continue the services under his own name in the same office.

Ralph Chatham in Business for Himself

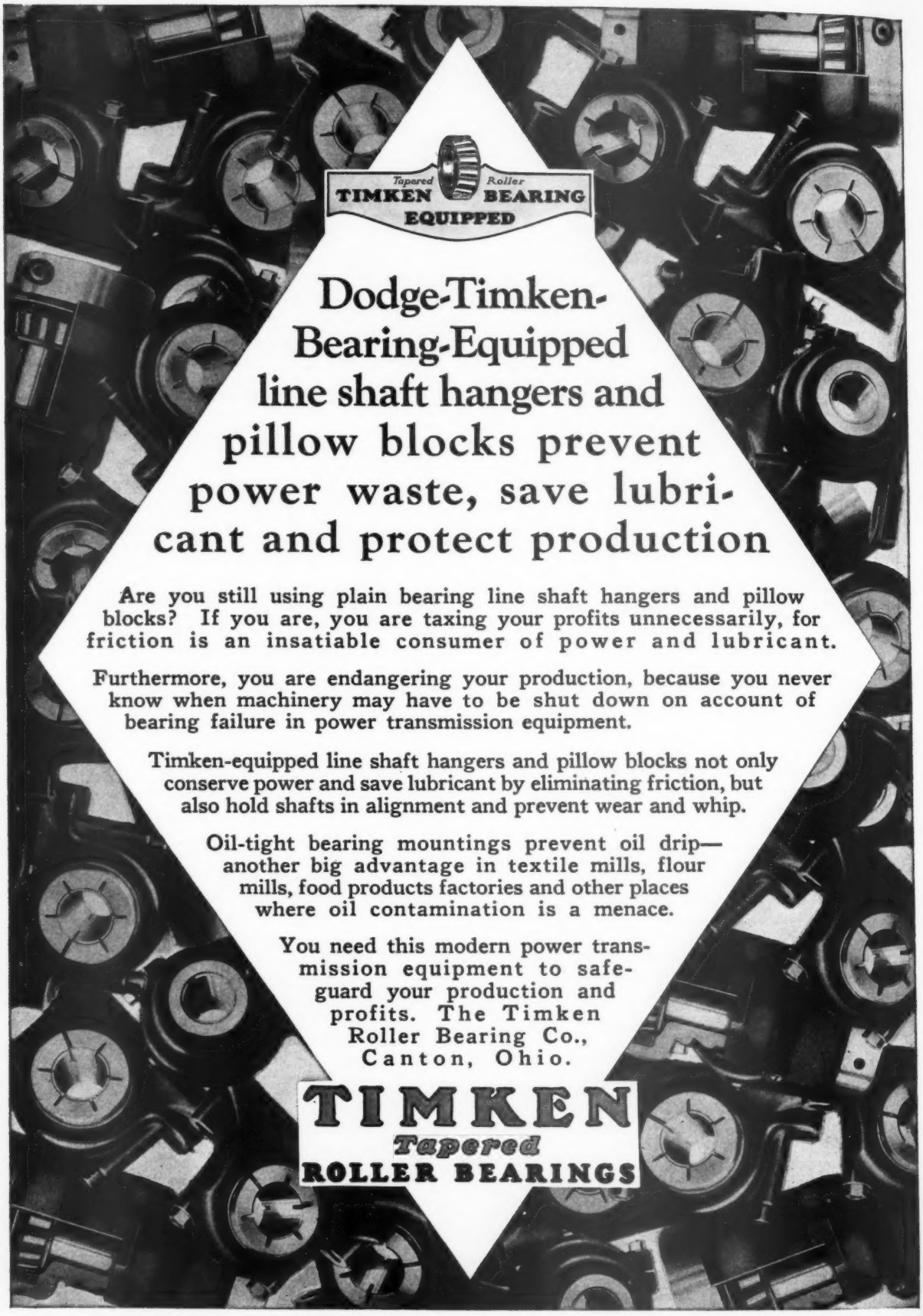
Ralph Chatham of Seattle has gone into business for himself as a consulting and contracting engineer, after having been identified with the B. F. Sturtevant Company for more than 25 years, nearly all of that time on the Pacific Coast.

Mr. Chatham will cooperate and work with industrial and mill and plant engineers in the design and construction of power plants. During the many years that he has lived in the West he has come into very close contact with the lumber and pulp industries. He will continue to specialize in sawmill and pulp power plant engineering and equipment.

New Information on Roll Grinding

The Farrell-Birmingham Company of Ansonia, Connecticut, is distributing a booklet "Assuring Production With Precision in Roll Grinding", which they have recently publshed.

This booklet explains the necessity for close accuracy and fine finish in rolls used for the manufacture of various products such as metal, paper, rubber, etc. and how the skill transferred into the mechanism of Farrel Roll Grinders permits the highest attainment of these requirements with a minimum of dependence upon human skill.


Tapered Roller
TIMKEN BEARING
EQUIPPED
Dodge-Timken-Bearing-Equipped line shaft hangers and pillow blocks prevent power waste, save lubricant and protect production
Are you still using plain bearing line shaft hangers and pillow blocks? If you are, you are taxing your profits unnecessarily, for friction is an insatiable consumer of power and lubricant.
Furthermore, you are endangering your production, because you never know when machinery may have to be shut down on account of bearing failure in power transmission equipment.
Timken-equipped line shaft hangers and pillow blocks not only conserve power and save lubricant by eliminating friction, but also hold shafts in alignment and prevent wear and whip.
Oil-tight bearing mountings prevent oil drip—another big advantage in textile mills, flour mills, food products factories and other places where oil contamination is a menace.
You need this modern power transmission equipment to safeguard your production and profits. The Timken Roller Bearing Co., Canton, Ohio.
TIMKEN
Tapered
ROLLER BEARINGS

S·A·F·E·T·Y

FIRST — LAST — ALWAYS

The best safety device known is a careful man

Pacific Coast Division
Pulp and Paper Section
NATIONAL SAFETY COUNCIL

ROBERT H. SCANLON
Regional Director
Powell River Co., Ltd.
Powell River, B. C.

Camas Mill After SAFETY Record

Driving toward a "No Accident Month" for August, the SAFETY department of the mill at Camas, Washington, Crown Willamette Paper Company, under the superivision of M. W. Kincaid, is in hopes of raising a new green and white "SAFETY flag" by having 30 days pass without a disabling accident.

With only one accident recorded late in July, a committee of four has been named to direct SAFETY operations to aid in discouraging any more accidents during the month. These committee members will instruct their foremen and superintendents, who in turn will advise their crews of the SAFETY measures to be practiced during the drive.

When the new flag arrived Mr. Kincaid had it put on display in the SAFETY meeting room in the mill office building. In trying to draw the mill workers' attention to the "No Accident" drive, Mr. Kincaid said that the flag may be hoisted to half mast on the flag pole to liven the men up to the idea of boosting it to the top.

The Jonah Day for Safety

By R. H. SCANLON, Assistant Manager
Powell River Company, Ltd.

Are there Jonah days in industrial safety? Is there one particular black letter day in the week, when the SAFETY barometer skids downward and the clouds on the accident prevention horizon loom up dark and threatening?

Superstition plays its part, even in this modern age of cynicism and debunking. A black cat crossing a trail still has the power to send a shiver of apprehension down the spine; Friday, the 13th, has not yet lost its menacing potency for seamen; few hostesses will defy convention to the extent of sitting thirteen guests at a table. Golfers have their petty superstitions. Some business men defer important decisions on certain days.

Are there, too, days in the industrial SAFETY calendar, when the spirit of fatalism supersedes the spirit of reason, when accidents are unavoidable, when what happens is so decreed and all the forces of reason, care and caution are unavailing. Is there a "Black Friday" on the accident prevention sheet?

To definitely ascertain whether or not a Jonah Day lurked in our SAFETY field, we recently tabulated the number of accidents that have occurred daily in our plant at Powell River during the past year. Our research, while confined solely to a year's operations, was, nevertheless, not without significance.

Over a period of twelve months there was no definite "Jonah Day" for SAFETY. The average for the year was fairly well distributed over the different days of the week. Our accident ratio was higher on Monday than on mid-week days; and the last two days of the week disclosed that the number of accidents reported to our First Aid Station again increased.

This proves a contention that has always been the background of all SAFETY propaganda—namely, that the relaxation of effort and a tendency to carelessness are among the most powerful forces in causing industrial accidents.

On Monday the employe returns to his work after a week-end holiday. Apparently "Blue" Monday brings with it a week-end hang over in the form of a slackened concentration. Several hours elapse before the employe strikes his normal stride. In these several hours have occurred the majority of the Monday accidents.

From Monday to Friday the accident ratio is lower. On Friday and Saturday the chart again takes an upward lunge, showing a slight, but noticeable increase in the number of accidents. Concentration in the matter of SAFETY has apparently slackened as the week-end approaches.

In other words, every day of every week, of every month of every year, is a potential Jonah Day. If caution, concentration and forethought are absent, the SAFETY barometer will drop.

Our research, as previously suggested, included the results of a single year's operation. Undoubtedly, if this were pursued further and extended to embrace operations for the past five or ten years, we should discover that there was a single day upon which more accidents occurred than on any other day. And for this

STATEMENT OF ACCIDENT EXPERIENCE—JUNE, 1931

(Mills in State of Washington)

COMPANY—	Hours Worked	Total Accidents	Frequency Rate	Days Lost	Severity Rate	Standing
Everett Pulp & Paper Co., Everett	56,488	0	0	0	0	1
Shaffer Box Co., Tacoma	12,714	0	0	0	0	2
Grays Harbor Pulp and Paper Co., Hoquiam	54,129	1	18.5	130	2.402	3
Crown Willamette Paper Co., Camas	301,647	7	23.2	272	.901	4
Washington Pulp & Paper Co., Port Angeles	76,124	2	26.2	29	.381	5
Longview Fibre Co., Longview	99,432	3	30.2	96	.966	6
Fibreboard Products Inc., Sumner	31,637	1	31.6	6	.190	7
Pacific Straw Paper & Board Co., Longview	23,560	1	42.4	19	.807	8
Puget Sound Pulp & Timber Co., Anacortes	23,344	1	42.8	40	1.713	9
Inland Empire Paper Co., Millwood	63,906	3	46.9	16	.250	10
Puget Sound Pulp & Timber Co., Everett	57,583	3	52.1	15	.260	11
Fibreboard Products Inc., Port Angeles	36,960	2	54.1	9	.243	12
Columbia River Paper Mills, Vancouver	48,443	3	61.9	53	1.094	13
National Paper Products Co., Port Townsend	80,603	6	74.4	67	.831	14
Rainier Pulp & Paper Co., Shelton	70,385	7	99.5	60	.852	15
Puget Sound Pulp & Timber Co., Bellingham	27,496	3	109.1	48	1.746	16

The following mills not reporting—Pacific Coast Paper Mills; Cascade Paper Co. (not in operation); Tumwater Paper Mills (not in operation). St. Regis Kraft Co. (not in operation).

there would undoubtedly be a reason. Possibly a day on which heavy repairs had been undertaken, or on a day when special work was in progress and the "unusual and unexpected" factor introduced in the equation.

Superstition plays no part in SAFETY. Accidents are not ordained. They can be prevented—and the best preventative is the old, efficient, if time worn prescription of continuous care and precaution on the part of the employes, superintendents, and management. The "Black" Fridays or the "Blue" Mondays in the accident calendar are mainly of our own construction.

Might I, in conclusion, add a word to the thought already expressed, and recommended that SAFETY engineers and officials in the pulp and paper mills of the Pacific Coast study again their accident records for the past several years. You may find a Jonah Day for accidents in your plant. This Jonah Day, if it exists, is due to conditions over which you have contral and which can be altered or revised.

Our suggestion, meanwhile, is that those responsible for SAFETY in their respective plants remember, that Jonah Day or no Jonah Day, accidents occur through causes which can be prevented by reason, care and co-operation.

Hawley Company Has Bad Fire

Paper valued at $250,000 by W. E. Graves, sales manager, was destroyed in a bad fire which raged in the Portland warehouse of the Hawley Pulp & Paper Company at East Second and Main Streets on July 25. The two-story concrete structure is used largely for storing newsprint rolls for Portland newspaper customers of the Hawley company.

Steps were immediately taken at the Hawley mill at Oregon City, about 15 miles distant, to speed up production to reestablish the normal warehouse supply.

The warehouse is not owned by the Hawley Puly & Paper Company as it was not included in the transaction when the present owners of the mill bought out W. P. Hawley. It is owned by Hawley and Mrs. Hawley and rented to the mill interests on a ten-year lease which has still about seven years to run. A provision in the lease calls for suspension in case of fire, but gives the lessor the option of rebuilding the warehouse and resuming the contract. W. P. Hawley, Jr., has informed PACIFIC PULP & PAPER INDUSTRY that reconstruction of the warehouse will be started at once. The damage to the warehouse, he declared, was not more than 50%.

The newsprint stock in the warehouse was used to supply the daily requirements of the Oregon Journal and The Morning Oregonian. The Hawley plant had shut down for the day, but as soon as word of the fire was heard by the management, employes were called back and the work was started immediately producing newsprint, which was rushed by truck to Portland. As it was, the Oregonian had to print its Sunday sports section on white stock instead of the customary peach-colored paper.

The Hawley plant has two other Portland warehouses.

Grays Harbor Mill Gets Tax Cut

A cut of $200,000 in the taxable valuation of the personal property of the Grays Harbor Pulp & Paper Company of Hoquiam, Washington, has been made by the Grays Harbor county board of equalization. This includes plant and all its machinery and stock.

The assessor had fixed the 100% valuation of the plant at $1,433,300. The board of equalization, by unanimous vote, reduced this to $1,043,300. Taxes are levied under the laws of Washington on 50% of the assessed valuation, so that the company will pay on half of the reduced figure, which will be $200,000 less than the valuation on which the company paid taxes last year.

The company operates a 175-ton bleached sulphite mill and 50-ton sulphite bond paper mill.

Camas Mill Operators In Golf Tilt

Mill manager and assistants, front office men, superintendents, chemists, paper makers, engineers, and right on thru the line, have tossed aside the cares of paper making in the big 350-ton specialty mill of the Crown Willamette Paper Company at Camas, Washington, to convene on the golf course and see who is best man.

E. H. Post, mill secretary, and chairman of the annual mill tournament committee, had 80 entrants on the list when play began in five flights of 16 players each. There are two prizes for every flight. The final playoff will take place in August.

Altho the ancient and honorable game claims a Scotch ancestry, there was no monopoly in this tournament on the part of the men from the "bonnie hills". As the play started off the entrants lined up like this:

First flight: G. W. Charters and J. L. Shively; L. C. Forgey and George E. Schmidt; George Wright and O. T. Defieux; Gus Ostenson and E. J. Rodgers; J. E. Hanny and Art Hannaford; Harrison Miller and O. Jessup; S. C. Carter and H. E. Ostenson; Gil Russell and J. L. Harreschou.

Second flight: Lawrence Blair and E. H. Post; E. R. Knauf and H. D. Kennedy; J. F. Smalley and F. A. Drumb; Louis Long and George Johnson; Howard M. Green and A. W. Rodgers; F. C. Stevey and P. V. Millard; C. Anderson and Ernest Hodge; Clyde Johnson and Bart Tidland.

Third flight: Charles F. Meyer and W. E. Lambert; Glen Long and Jim Frank; R. Russell and Fred Carey; Miles Murray and N. E. Johnson; E. B. Mason and George R. Lund; C. E. Laver and C. Wagner; Forrest Van Landingham and William Hart; W. H. Vilas and William Mills.

Fourth flight: R. H. Kolberg and Victor C. Gault; S. A. Salmonson and H. A. Roberts; J. H. McHone and G. A. Sunderleaf; T. R. McGlothlin and J. McEnry; Lexie Smith and E. J. Hughes; L. D. Rice and William Benson; C. Esser and Henry Lorenz; J. M. Turlington and Gus Dietzman.

Fifth flight: Jack Johnson and D. L. Knauf; E. Darrington and Hugh Klingbeil; H. Rickard and Phil Churchward; Leonard Smith and Lyman Rohrer; Peter D. Duignan and E. W. G. Cooper; George Nott and M. W. Phelps.

Renewed Interest In Colorado Pulp Timber

Altho talk of establishing a wood pulp industry in Colorado has waned somewhat in the past few months, United States forestry officials declare that possibilities are far from ended.

While the International Paper company has withdrawn from the field, other reliable companies are showing considerable interest in the cutting of pulp timber in the San Juan and Rio Grande forests, it was stated.

The International company made the high bid on the timber last summer and posted $75,000 bond. An extension of time to take up its option was granted, but the corporation has since forfeited $15,000 of its bond and withdrawn from the field.

The Combined Locks Paper Company, which bid with the International company, is still interested in the project and forest service officials believe a deal will be made as soon as business conditions return to normal.

T-A-P-P-I

Pacific Coast Section

Chairman—C. W. MORDEN,
C. W. Morden Co., Portland, Oregon

Vice-Chairman—HARRY ANDREWS,
Powell River Co., Ltd., Powell River, B. C.

Secretary-Treasurer—MYRON W. BLACK,
Inland Empire Paper Co., Millwood, Wash.

The following letter was written by a man who has been a member of TAPPI for a number of years and active in the Pacific Section ever since organization. He has asked that his name be withheld "because individual economic safety, like discretion, is the better part of valor."

A Few Questions on TAPPI

The Pacific Coast section of TAPPI has been organized for some time. What is it accomplishing, if anything? Who is being benefitted thereby? If any benefit is being reaped, who is paying for it?

The preamble to the constitution of TAPPI says something about the dissemination of technical knowledge in regard to pulp and paper manufacture and the benefit to be reaped by mutual exchange of ideas. Yes, but whose knowledge and whose ideas? And hereby hangs a tale.

The tale has to do with whether TAPPI exists as an organization to benefit the industry as a whole and indirectly everyone in it or to promote the usefulness and the interests of the technical men of the industry. As a matter of fact TAPPI is an offshoot of APPA and as such is part of a manufacturers' association. The parent body has rendered sterling service to the industry in many ways not necessary to quote here. Have the individual members benefitted in like manner or received any advantage over their fellows who remained aloof?

Sad to say they have not unless it be in the intangible field of honor and reputation and where their work was of real outstanding value they would have received their modicum of praise in any case. The association with their confreres and exchange of ideas has helped the technical men to make their work more valuable to their employers but the lion's share of any tangible rewards have always accrued to the manufacturer. Did the manufacturer pay for it? Partly, but in all probability the bulk of the expense was borne by the individual technical man, usually underpaid, who hoped to improve his sorry lot by joining TAPPI.

Rather a travesty this TAPPI. Here we have a group of men organized to promulgate knowledge and exchange ideas that are not their own to bandy about. The brain of the technical man is hired to his employer and its fruits are the employer's property. Who is he then to meet and magnanimously spread at large what he has sold to another? As a matter of fact if he be wise he takes good care not to give away what might be of value and immediately the purpose of his altruistic society is vitiated.

To sift the matter down TAPPI either should be a manufacturer's organization for the promulgation of valuable technical data of a non-competitive character such as standardization or joint research or it should be a society for the promotion of the interests of the technical man. In any case whoever reaps the benefit should bear the cost. Certainly it is hard to maintain enthusiasm for the present hybrid and under the existing arrangement TAPPI promises to be as sterile as the mule.

Why don't the technical men look the matter square in the face and tell the manufacturers that if they want a technical association to pay for it and define its aims. Then have a decent professional organization for themselves if they feel they must have it and can get away with it.

A recent new member of TAPPI is Arnold Hegg, a chemist at the Hoquiam, Washington, plant of the Grays Harbor Pulp & Paper Corporation. Mr. Hegg graduated from the University of Washington in 1929.

* * *

Guy F. Mitchell, sales engineer for the Hesse-Ersted Iron Works of Portland, is a member of TAPPI. He has had 30 years of experience in the design, construction, operation and sales of machinery.

* * *

There's a new assistant superintendent at the Bellingham mill of the Puget Sound Pulp & Timber Company. He is W. Norman Osborne, until recently with the Grays Harbor Pulp & Paper Corporation of Hoquiam, Washington.

* * *

George Moorehead, who has been chemist at the 110-ton glassine and bleached specialty mill of the Oregon Pulp & Paper Company at Salem, Oregon, for some time, is now night superintendent of the company's sulphite pulp mill.

* * *

Secretary R. A. Macdonald of TAPPI is busy these days with his plans for the annual fall meeting of the national body at Kalamazoo, Michigan, on September 24, 25 and 26. The Paper Technologist Club, organized in Kalamazoo five years ago for the intensive study of paper problems, has applied for and received a charter as a section of TAPPI.

In taking over the local convention details for the fall meeting the Kalamazoo section is immediately leaping into national affairs in a big way.

Waldron Builds New Automatic Web Guide

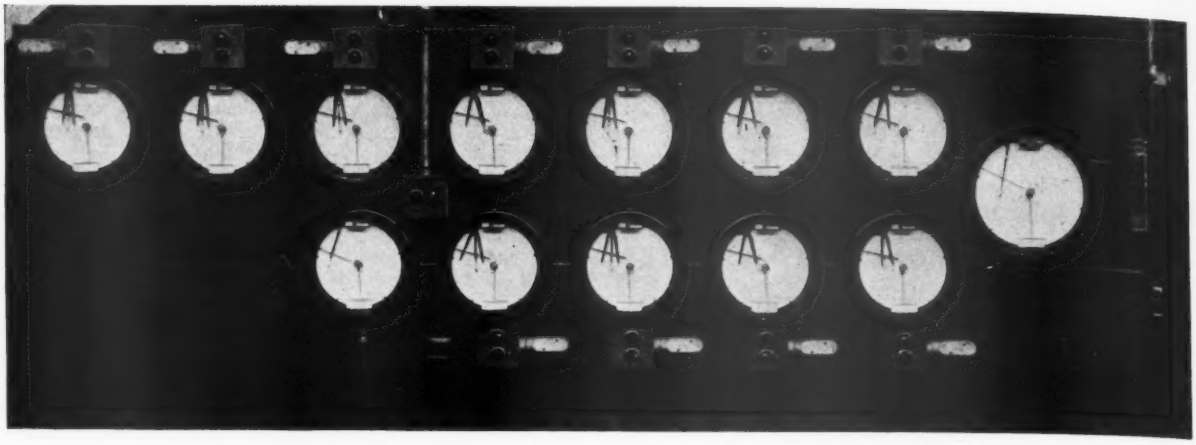
Correct web control during the processing or converting of a fibre sheet in a continuous operation, is the means of producing a more uniformly finished article, more uniform bundles and with less waste.

With this basic thought in view, the John Waldron Corporation of New Bruiswick, N. J., has devoted a number of its century plus years of experience to perfecting equipment that would assure materials following a true line of travel.

The introduction of the Waldron-Dickhaut Automatic Web Guide completely and efficiently supplies the need for a web control to compensate automatically for the tendency of processed materials to follow other than its anticipated course through the converting operation. The Waldron Automatic Guide also makes it possible to perfect tandem operations that would otherwise be impractical to perform. With the perfection of automatic tensioning devices, the manually controlled tensioning adjustments that are always a variable quantity are eliminated.

The John Waldron Corporation has prepared a bulletin which fully describes and completely illustrates the various types of guides and tensioning devices.

Full information and a copy of this illustrated bulletin may be secured without obligation from the Waldron office on the Pacific Coast, 311 Lewis Building, Portland, Ore.



Cut Costs by Closer Stock Control

THESE Foxboro Liquid Level Recorders are on the stock chests and white water lines of a large Canadian Paper Mill. They form one of several Stock Control Boards in that mill.

The beater engineer or superintendent knows all the time—exactly how much stock he has in reserve for the paper machines—the rate of consumption of stock—the time any machine was idle because of breaks—the amount of pulp pumped into the stock chests after each beater dumping.

In mixing pulp stocks correct proportions can be maintained and production costs kept at a minimum.

Foxboro Liquid Level Recorders not only keep the operators informed of stock conditions; they accurately record those conditions for reference and checking and the establishing of valuable schedules for future runs.

In conjunction with flumes and weirs, Foxboro Liquid Level Recorders offer the most economical method of obtaining a continuous check on white water losses.

One of the outstanding features of these instruments is the *high and low electric alarm*. Warning lights flash when levels reach the operating limits. There is no overflow loss, no machine interruption through failure of stock.

There are other paper mill uses for Foxboro Liquid Level Recorders of equal value and importance. Write to Dept. P. C. for full particulars.

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Canadian Exports of Pulp and Paper June—1931

Canadian exports of pulp and paper in June were valued at $12,635,490 according to the report issued by the Canadian Pulp and Paper Association. This was a decrease of $150,624 from the previous month.

Wood-pulp exports for the month were valued at $2,241,548 and exports of paper at $10,393,942 as compared with $2,428,245 and $10,357,869 respectively in the month of May.

Details for the various grades of pulp and paper are as follows:

	June, 1931		June, 1930	
	Tons		Tons	
PULP—				
Mechanical	8,589	$234,925	12,867	$367,839
Sulphite Bld.	21,013	1,341,360	19,726	1,490,402
Sulphite Unbld.	10,259	428,256	16,958	857,934
Sulphate	3,149	204,707	6,617	384,490
Screenings	1,170	19,853	2,136	41,219
All Other	233	12,447	920	66,980
	44,413	$2,241,548	59,224	$3,208,864
PAPER				
Newsprint	189,739	$10,069,585	194,322	$11,209,856
Wrapping	830	75,838	1,103	115,729
Book (cwts.)	2,648	22,653	3,667	36,189
Writing (cwts.)	.....	.....	924	7,275
All Other	.....	225,866	.....	285,810
		$10,393,942	.....	$11,654,859

For the first six months of the year the exports of pulp and paper were valued at $73,423,829. In the corresponding months of 1930 the value was $91,508,567, so that there has been a decrease this year of $18,084,738.

Details for the various grades are given below:

	6 Mos., 1931		6 Mos., 1930	
	Tons		Tons	
PULP—				
Mechanical	71,554	$2,087,419	91,484	$2,681,195
Sulphite Bld.	119,715	7,745,816	135,996	10,094,863
Sulphite Unbld.	68,156	2,962,328	105,612	5,267,905
Sulphate	54,386	1,993,246	50,732	2,936,302
All Other	9,883	246,625	14,261	343,445
	323,694	$15,035,434	398,085	$21,323,710
PAPER—				
Newsprint	1,025,674	$56,334,222	1,167,604	$67,307,963
Wrapping	5,568	514,791	7,499	787,325
Book (cwts.)	12,938	110,739	21,064	198,761
Writing (cwts.)	1,300	12,003	1,992	17,080
All Other	.....	1,416,640	.....	1,873,728
		$58,388,395		$70,184,857

Pulpwood exports for the first six months of this year were 395,400 cords valued at $3,688,616 as compared with 633,443 cords valued at $6,166,167 in the corresponding months of last year.

Rodier Returns from the Islands

George L. Rodier, San Francisco, Pacific Coast manager of the West Virginia Pulp & Paper Company, returned in July from a visit to the Hawaiian Islands and left soon after on a vacation trip to Southern California. This was Mr. Rodier's second trip to the islands and he reported it a successful cruise.

IMPORTS OF PULP WOOD AND WOOD PULP INTO THE UNITED STATES BY COUNTRIES AND CUSTOMS DISTRICTS

May, 1931

Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce
(Figures Subject to Revision.)

PULP WOOD

	Rough				Peeled				Rossed			
	Spruce		Other		Spruce		Other		Spruce		Other	
	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars
COUNTRIES—												
Canada	10,835	118,652	.....	.....	38,767	448,266	10,240	79,532	665	8,095	.....	.....
Total	10,835	118,652	.....	.....	38,767	448,266	10,240	79,532	665	8,095	.....	.....

Total imports of pulpwood, May, 1931—60,507 cords—$654,545.

WOOD PULP

	Mechanically Ground				Chemical Unbleached Sulphite		Chemical Bleached Sulphite		Chemical Unbleached Sulphate		Chemical Bleached Sulphate		Soda Pulp, Unbleached and Bleached	
	Unbleached		Bleached											
	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars
COUNTRIES:														
Czechoslovakia	.....	.....	.....	.....	151	5,987	606	31,766	30	1,168	.....	.....	.....	.....
Estonia	.....	.....	.....	.....	992	41,180	.....	.....	.....	.....	.....	.....	.....	.....
Finland	379	9,778	464	9,630	6,570	254,009	989	50,302	2,419	64,967	432	23,219	.....	.....
Germany	.....	.....	.....	.....	715	31,293	3,721	219,588	.....	.....	.....	.....	.....	.....
Netherlands	.....	.....	.....	.....	.....	.....	81	6,378	.....	.....	.....	.....	.....	.....
Norway	100	2,735	445	9,560	125	6,244	150	9,674	.....	.....	.....	.....	.....	.....
Poland and Danzig	.....	.....	.....	.....	.....	.....	.....	.....	126	3,542	.....	.....	.....	.....
Sweden	55	1,544	180	4,109	12,011	534,834	3,975	216,934	7,098	233,301	152	10,725	.....	.....
Canada	9,822	265,089	29	1,325	7,459	324,464	15,924	1,056,674	2,294	132,532	1,184	112,911	294	15,961
Total	10,356	279,146	1,118	24,624	28,023	1,198,011	25,446	1,591,316	11,967	435,510	1,768	146,855	294	15,961
CUSTOMS DISTRICTS:														
Maine and New Hampshire	3,254	93,913	.....	.....	6,131	278,667	5,036	305,609	977	26,172	.....	.....	.....	.....
Vermont	722	19,212	.....	.....	456	18,669	886	51,431	1,397	94,869	1,184	112,911	131	6,953
Massachusetts	.....	.....	295	5,894	2,156	96,778	2,595	163,427	1,407	43,292	331	17,742	.....	.....
St. Lawrence	1,338	36,110	.....	.....	1,210	55,757	3,966	255,226	395	21,071	.....	.....	163	9,003
Rochester	64	2,166	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo	794	14,558	.....	.....	2,473	101,275	1,045	81,036	.....	.....	.....	.....	.....	.....
New York	.....	.....	374	8,310	6,276	267,932	1,275	70,140	481	13,183	.....	.....	.....	.....
Philadelphia	1,258	48,025	100	2,344	1,537	60,460	847	51,111	696	28,891	.....	.....	.....	.....
Maryland	479	12,513	50	1,103	4,497	192,474	2,287	122,996	3,084	105,932	48	2,577	.....	.....
Virginia	.....	.....	240	4,973	698	26,233	166	8,871	1,649	46,676	53	2,900	.....	.....
Mobile	55	1,544	30	675	60	2,416	.....	.....	30	1,168	.....	.....	.....	.....
New Orleans	.....	.....	.....	.....	264	8,040	32	1,733	348	8,085	152	10,725	.....	.....
Los Angeles	.....	.....	.....	.....	.....	.....	.....	.....	1	32	.....	.....	.....	.....
San Francisco	.....	.....	.....	.....	33	704	.....	.....	54	930	.....	.....	.....	.....
Washington	.....	.....	.....	.....	332	12,032	350	18,509	.....	.....	.....	.....	.....	.....
Dakota	.....	.....	.....	.....	.....	.....	330	17,291	428	14,864	.....	.....	.....	.....
Duluth and Superior	564	8,746	.....	.....	124	1,813	28	1,588	.....	.....	.....	.....	.....	.....
Wisconsin	.....	.....	.....	.....	510	26,698	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	1,828	42,359	29	1,325	1,233	46,892	6,603	442,348	20	798	.....	.....	.....	.....
Chicago	.....	.....	.....	.....	.....	.....	.....	.....	1,000	29,547	.....	.....	.....	.....
Colorado	.....	.....	.....	.....	33	1,171	.....	.....	.....	.....	.....	.....	.....	.....
Total	10,356	279,146	1,118	24,624	28,023	1,198,011	25,446	1,591,316	11,967	435,510	1,768	146,855	294	15,961

Total all grades of wood pulp, May, 1931—78,972 tons—$3,691,423.

Crown Zellerbach Annual Earnings

A consolidated profit of $9,587,187 before depreciation, depletion, interest and taxes is shown in the annual report of the Crown Zellerbach Corporation for the fiscal year ended April 30, 1931. Net income after charges was $2,999,157. Dividends aggregating $2,116,866 were paid on the company's preference and common stocks. Common stock dividends were omitted after payment in the first two quarters and preferred dividends were reduced.

During the year $3,093,973 was invested in properties and plants. The extensive development and improvement program was completed during the year under review.

"The utmost efforts of your management have been directed towards the reduction of costs and the marketing of the products produced by the new units," President I. Zellerbach points out in his letter to the stockholders. "Papers of many kinds are being produced at costs that were considered unattainable even a few months ago.

"With regard to the outlook for the future," Mr. Zellerbach states, "we are by no means certain that prices have reached their lowest levels. On the other hand, we are assured of our ability to produce paper as cheaply as any competitor; we have spent millions of dollars in plant improvements which will bear fruit in the near future and our principal market is in that part of the United States which is growing most rapidly in population and wealth.

"We look forward to the future with courage and confidence."

CAPITAL

Capital Stocks of Subsidiaries in Hands of Public: (including proportionate interest in surplus):		
Crown Willamette Paper Co., entire preferred issues:		
200,000 shares, no par value, first preferred $7 cumulative	$20,116,666.67	
41,000 shares, no par value, second preferred $6 cumulative	4,120,500.00	
Pacific Mills Limited:		
5,799.09 shares $100 par value 6% cumulative preference (outstanding 19,989 shares)	579,909.00	
5,256.125 shares $100 par value ordinary shares (outstanding 75,000)	959,207.65	
Minority interests in other subsidiaries	107,926.52—	25,884,209.84
Crown Zellerbach Corporation Capital Stock and Surplus:		
Preference stocks convertible, cumulative $6 dividend, no par value:		
Series A, 198,334 shares outstanding, less 7,603 shares in treasury	$15,347,142.37	
Series B, 60,000 shares outstanding, less 130 shares in treasury	5,388,300.00	
Common stock, no par value, 1,991,680 shares outstanding, less 123,558 shares in treasury (120,073 shares pledged as collateral for loans payable subsequent to April 30, 1932	22,735,776.17	
	$43,471,218.54	
Surplus:		
Capital surplus	$ 250,883.08	
Earned surplus	2,817,602.80	3,068,485.88— 46,539,704.42
		$118,183,794.70

CROWN ZELLERBACH CORPORATION AND ITS SUBSIDIARIES

Consolidated Balance Sheet, April 30, 1931

ASSETS

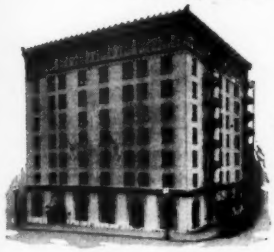
Current:		
Cash	$ 2,331,700.96	
Notes and accounts receivable, less allowance for losses	7,440,180.31	
Inventories, at cost or market, whichever was lower	12,196,669.01	
Total current assets		$21,968,550.28
Investments and Receivables, Other Than Current:		
Investment in Fibreboard Products Inc., represented by 39.7% of the $7 preferred stock, 44.1% of the Class A common, and 50% of the Class B common, at proportionate book value	$ 7,020,172.91	
Investment in St. Regis Paper Company (partly pledged as collateral for loans payable subsequent to April 30, 1932), market value $789,125.00, at cost	1,676,460.00	
Other investments not readily marketable, and receivable, at cost	1,610,036.25—	10,306,669.16
Capital Assets:		
Land, timberlands, leases, etc., less depletion and amortization	$35,272,407.61	
Buildings, machinery, and equipment $70,202,168.43		
Less, allowance for depreciation 20,986,560.97	49,215,607.46—	84,488,015.07
Deferred Charges to Operations:		
Unamortized expense	$763,450.43	
Prepaid insurance, taxes and other advanced expenses, etc.	657,109.76—	1,420,560.19
		$118,183,794.70
		$45,759,880.44

LIABILITIES

Current:		
Notes payable to banks	$ 5,545,000.00	
Accounts payable, including accrued expenses	3,920,544.11	
Accrued United States and Canadian income taxes, including prior years	866,337.00	
Mortgage notes and contracts maturing prior to April 30, 1932	210,387.46	
Total current liabilities		$10,542,268.57
Mortgages, Notes, Contracts, Etc., Payable Subsequent to April 30, 1932		3,457,778.05
Bonds Payable:		
Crown Willamette Paper Co., first mortgage sinking fund 6% gold bonds, due 1951	$17,908,500.00	
Pacific Mills Limited:		
First mortgage 6% serial gold bonds, due 1932 to 1939	2,097,000.00	
Guaranteed subordinated mortgage 6% gold bonds, due 1943 to 1945	1,770,000.00	
Washington Pulp & Paper Corporation, first mortgage 6½% bonds, due 1941	169,000.00	
Crown Zellerbach Corporation, ten-year 6% gold debentures, due 1940	9,625,000.00—	31,569,500.00
Special Reserves		190,333.82
		$45,759,880.44

THE HOTEL CONGRESS

The stopping place in Portland for Pulp and Paper Men



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Position Wanted

By executive with a wide and varied experience in manufacturing, selling and financing for pulp and paper mills. A trained chemist and mill superintendent.

For past four years manager of a large specialty paper mill making toilet tissue, paper toweling, waxing paper and light weight specialties.

Desire to make connection with Pacific Coast mill. Excellent references available.

Address reply: Box 112, Pacific Pulp & Paper Industry, 71 Columbia St., Seattle, Wash.

Position Wanted

as draftsman or plant engineer in paper or pulp mill or other industrial plant. Twenty years' experience as draftsman and maintenance engineer. Best of references.

Address reply: Box 113, Pacific Pulp and Paper Industry, 71 Columbia St., Seattle, Wash.

New World Paper Industry Directory

The new edition of "Paper Makers' Directory of All Nations" for 1931 (cloth bound, 1050 pp., 21/-net), has just been published.

The international character of this—the 40th annual issue—renders it of special interest to all those who are in any way connected, or have business relations, with those in the paper and allied trades, while the alphabetical nature of its arrangement makes it particularly easy for reference.

Cellophane is to be manufactured in Canada in a new plant to be erected at Three Rivers, Quebec, by the Canadian Industries, Ltd., it is announced by Arthur B. Purvis, president and managing director. The new plant is expected to be in production in the Spring of 1932.

Request for Bids on Paper Board Mill and Equipment

State of Colorado, County of Adams, ss. In the District Court, Charles B. Myers, plaintiff, vs. Colorado Pulp and Paper Company, et al., defendants.

Pursuant to the direction of Hon. E. V. Holland, presiding Judge of the district court of the second judicial district in charge of said cause, notice is hereby given that sealed bids, addressed to the Clerk of the District Court of the City and County of Denver, Colorado, at his office in the Court House in Denver, Colorado, marked on the outside thereof "Bids for the Property of the Colorado Pulp and Paper Company" will be received at any time prior to the first day of September, A. D. 1931, for the purchase of the property of the Colorado Pulp and Paper Company hereinafter particularly described, for cash free of liens or upon such other terms and subject to such conditions as bidders may wish to submit, subject, however, to the right on the part of the said judge to accept or reject any or all bids or offers so made.

The property to be sold and for which bids are sought is described as follows:

The west half of the southeast quarter of the southwest quarter (W½SE¼SW¼) of Section Twelve (12), Township Three (3) South, Range Sixty-eight (68) West of the Sixth Principal Meridian, except a strip of land one hundred (100) feet in width, and six hundred sixty (660) feet, more or less, in length across the entire north end of said west half of the southeast quarter of the southwest quarter (W½SE¼SW¼) of said Section twelve (12), being the north one hundred (100) feet of said tract of land; also except all rights of way now occupied for railroads and railroad purposes; and also except rights of way and easements now occupied for ditches and ditch rights, if any there be, together with all buildings, structures, wells, fixtures, machinery, equipment, and all other improvements now situate thereon, situated in the County of Adams, State of Colorado.

Also the following described parcels of land situated in the County of Gilpin, State of Colorado:

All right, title and interest of said company in and to the north one-half (N½) of Section thirty-six (36), Township One (1) South, Range seventy-four (74) west of the Sixth Principal Meridian; all of the Walter A. placer mining claim and the following lode mining claims: The Argo, Snow Ball Number one (1) and two (2), Mystery, Scranton Numbers one (1), two (2), three (3) and four (4), Caroline M. Little Totsey; Flying Job and Reward. All of the above property in Sections twenty-six (26) and thirty-five (35), Township one (1) South, Range seventy-four (74) west of the Sixth Principal Meridian.

All bids so received will be submitted to the Judge in charge of said cause on the first day of September, 1931, or at such other time as he may direct.

Dated this 26th day of June, A. D. 1931.

F. D. STACKHOUSE, Clerk of Court,
Court House, Denver, Colorado.

Fine Face Canvas Dryer Felts *for* Fine Papers

ENGLISH or BAKER WOVEN

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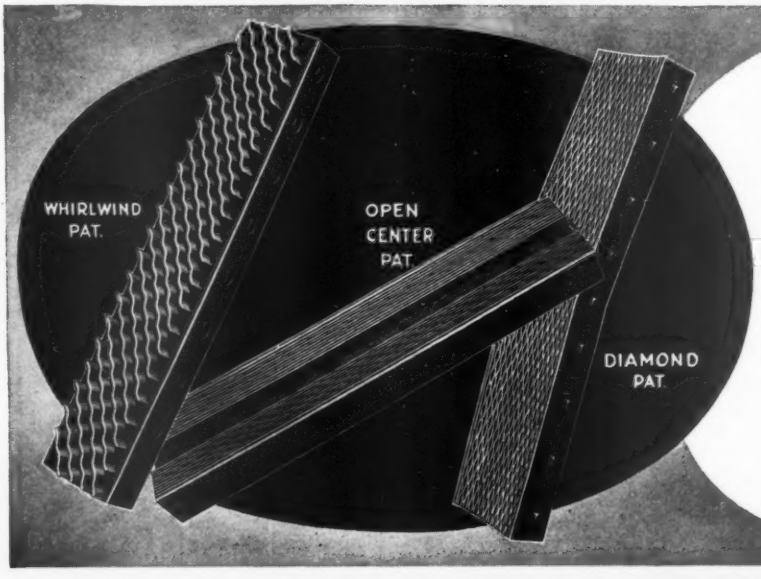

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The Paper and Pulp Industry in May, 1931

According to identical mill reports to the Statistical Department of the American Paper and Pulp Association from members and cooperating organizations, the daily average of total paper production in May decreased 2% under April, and was 8% under May, 1930. The daily average wood pulp production in May was 1% below April, 1931, and 14% under May, 1930.

Compared with May a year ago, the daily average production registered a decrease in the following grades: Newsprint, uncoated book, bag, wrapping, writing, hanging and building papers. Compared with April, 1931, the following percentage decreases were registered in the daily average production: Newsprint, 1.2%; uncoated book, 0.4%; paperboard, 2.8%; wrapping, 1.2%; writing, 5.2%; tissue, 5.0%; and hanging, 4.8%. Total shipments of all major grades decreased 11% during the first five months of 1931 as compared with the first five months of 1930.

Identical pulp mill reports for the first five months of 1931 indicated that the total pulp consumed by reporting mills was 17% less than for the first five months of 1930, while total shipments to the open market during the first five months were 28% below the total for the same period of 1930.

Pulp inventories showed a decrease, and at the end of May, total stocks of all grades of pulp were 24% below the level of the preceding year. As compared with the end of April, 1931, groundwood, news grade sulphite and kraft pulps were the only grades showing a decrease in inventory.

REPORT OF PAPER OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF MAY, 1931

GRADE—	Production Tons	Shipments Tons	Stocks on Hand End of Month—Tons
Newsprint	101,202	102,555	32,956
Book, Uncoated	76,933	74,176	48,786
Paperboard	158,820	160,529	61,614
Wrapping	44,675	43,806	44,521
Bag	12,272	12,378	5,993
Writing, etc.	24,634	25,195	49,406
Tissue	5,966	5,470	4,444
Hanging	3,108	3,172	4,201
Building	5,607	5,769	2,623
Other Grades	16,504	17,261	14,447
Total—All Grades, May, 1931	449,721	450,311	268,991

REPORT OF WOOD PULP OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF MAY, 1931

GRADE—	Production Tons	Used During Month—Tons	Shipped During Month—Tons	Stocks on Hand End of Month—Tons
Groundwood	89,542	75,733	1,783	72,561
Sulphite News Grade	26,542	26,342	789	4,712
Sulphite Bleached	19,131	16,820	1,900	2,509
Sulphite Easy Bleaching	2,295	2,068	103	696
Sulphite Mitscherlich	3,331	2,493	802	1,432
Kraft Pulp	28,919	24,810	4,522	7,198
Soda Pulp	17,666	14,372	3,251	2,844
Pulp—Other Grades	257	461	75	103
Total, All Grades May, 1931	187,683	163,099	13,225	92,055

News Print Production—June, 1931

The News Print Service Bureau's Bulletin No. 162 states that production of news print paper in Canada during June, 1931, amounted to 193,971 tons and shipments to 194,144 tons. Production in the United States was 101,086 tons and shipments 100,087 tons, making a total United States and Canadian news print production of 295,057 tons and shipments of 294,231 tons. During June, 25,220 tons of news print were made in Newfoundland and 1,453 tons in Mexico, so that the total North American production for the month amounted to 321,730 tons.

The Canadian mills produced 147,262 tons less in the first six months of 1931 than in the first six months of 1930, which was a decrease of 12 per cent. The output in the United States was 91,083 tons or 13 per cent less than for the first six months of 1930. Production in Newfoundland was 4,782 tons, or 3 per cent more in the first six months of 1931 than in 1930 and in Mexico 459 tons less, making a continental decrease of 234,022 tons or 11 per cent.

During June the Canadian mills operated at 60.3 per cent of rated capacity, United States mills at 67.8 per cent, Newfoundland mills at 99.6 per cent, and Mexican mills at 78.7 per cent, making a continental average of 64.6 per cent. Stocks of news print paper at Canadian mills totalled 39,832 tons at the end of June, and at United States mills 33,906 tons, making a combined total of 73,738 tons which was equivalent to 4.1 days' average production.

	North American Production				
	Canada	United States	Nflnd.	Mexico	Total
1931—June	193,971	101,086	25,220	1,453	321,730
Six Months	1,136,896	595,208	144,934	7,714	1,884,752
1930—Six Months	1,284,158	686,291	140,152	8,173	2,118,774
1929—Six Months	1,311,322	697,709	122,928	9,438	2,141,397
1928—Six Months	1,158,723	718,800	111,665	7,711	1,996,899
1927—Six Months	997,669	775,043	98,673	7,596	1,878,981
1926—Six Months	893,753	844,017	84,554	6,169	1,828,493
1925—Six Months	747,537	762,953	34,466	6,269	1,551,225
1924—Six Months	679,143	758,923	32,452	5,748	1,476,266

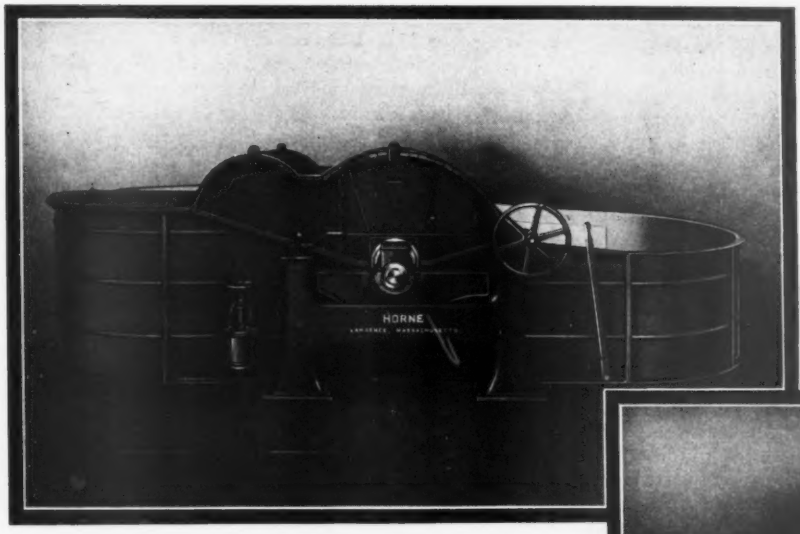
Japan's Pulp Imports During May, 1931

Japan imported chemical pulp during May as follows (amounts stated in pounds): Sweden, 1,374,133; Norway, 2,169,733; Germany, 440,533; U. S. A., 5,014,533; Canada, 11,370,400; Finland, 165,067; Holland, 800; Czecho-Slovakia, 109,468; Europe, 1,293,200; total 21,937,867.

WANTED

Pacific Coast position with firm building pulp and paper machinery. Will supply complete detail drawings — grinders, chippers, chip screens, shredders, crushers, stock valves, diaphragm screens, wet machines, sulphur burners, jordans, heaters, etc. American, 38. Now employed. Accustomed to full charge sales, design, manufacture.

W. R. Tidmarsh, 1972 Tansley Street, Montreal, Que., Canad.



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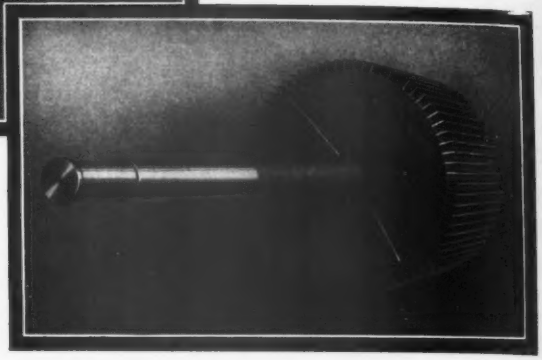

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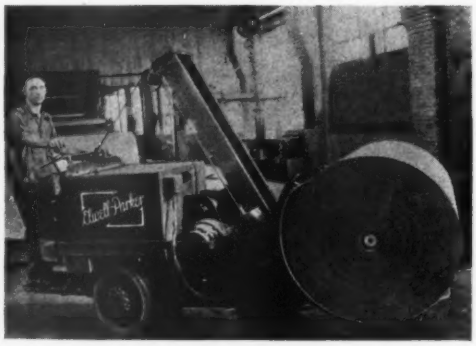

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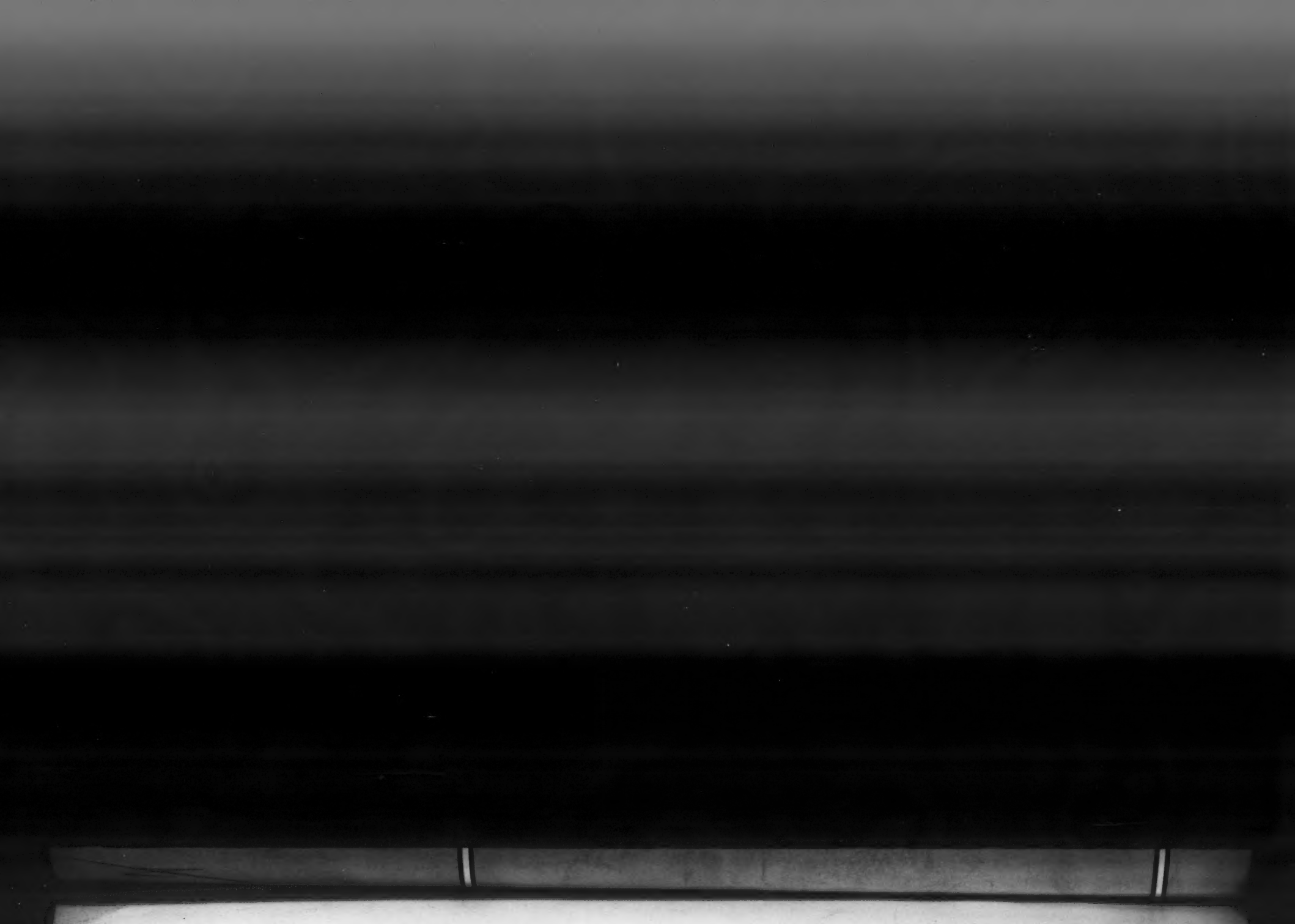
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